1988
ALBERTA HOUSE COST COMPARISON STUDY

Single Detached Dwelling

Alberta
MUNICIPAL AFFAIRS
Housing Division

1988 ALBERTA HOUSE COST COMPARISON STUDY

SINGLE - DETACHED DWELLING

SEPTEMBER 1988

Prepared by :

Helyar & Associates
#200 14727 - 87 Avenue
Edmonton, Alberta
T5R 4E5

Prepared for :

Alberta Municipal Affairs
Housing Division
Research and Development Section
2nd Floor, 9925 - 107 Street
Edmonton, Alberta
T5K 2H9

ISSN 0822-3904

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PREFACE

The main purpose of the 1988 Alberta House Cost Comparison Study was to provide estimates of the hard construction costs of a prototypical single-detached dwelling and a 24 unit walk-up apartment in ten urban centres in this Province.

The study also compared 1988 residential construction costs with those of previous years in the selected urban centres. Most emphasis was given to a comparison of 1988 with 1987 costs and the study included an analysis of these differences.

The 1988 study was carried out by Helyar & Associates and is documented in three reports:

1988 Alberta House Cost Comparison Study : Executive Summary
1988 Alberta House Cost Comparison Study : Single-Detached Dwelling
1988 Alberta House Cost Comparison Study : Walk-Up Apartment

Additional copies of any of these reports can be ordered from :

ALBERTA MUNICIPAL AFFAIRS
Housing Division
Research and Development Section
2nd Floor, 9925 - 107 Street
Edmonton, Alberta
T5K 2H9

1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Objectives

The objectives of the 1988 Alberta House Cost Comparison Study were:

1. To determine 1988 hard residential construction costs in selected urban centres in Alberta.
2. To determine reasons for differences in residential construction costs in the selected centres.
3. To carry out detailed comparisons of 1988 residential construction costs with 1987 residential construction costs in the selected centres.
4. To determine and comment on residential construction cost trends over the last nine years in the selected centres.

1.2 Scope of Work

The 1988 Alberta House Cost Comparison Study examined the construction costs of a typical single-detached dwelling and a 24 unit walk-up apartment building.

The study has been documented in three reports : an Executive Summary, a report on a typical single-detached dwelling and a report on a walk-up apartment. This report deals with the single-detached dwelling.

The study examined building construction costs in the following centres:

1. Edmonton
2. Calgary
3. Red Deer
4. Fort McMurray
5. Grande Prairie
6. Hinton
7. Lethbridge
8. Medicine Hat
9. Lloydminster
10. Peace River

1.0 INTRODUCTION

1.2 Scope of Work (continued)

The cost analysis of both the single-detached dwelling and the walk-up apartment examined the building construction cost differences between each of the centres and identified the reasons for those differences with reference to such factors as :

a) material costs,
b) labour costs, and
c) building features and inclusions.

The cost estimates of the single-detached dwelling for each centre include all structural, finishing, mechanical, and electrical work as shown on the drawings and included in the specifications, and also include allowances for site overhead. The cost estimate excludes the following items :

a) cost of land and site clearance,
b) site servicing costs,
c) site development costs,
d) design fees and expenses,
e) legal fees and expenses, and
f) marketing and real estate financing costs,
g) appliances (fridge and stove), and
h) general contractor's overhead and profit.

1.0 INTRODUCTION

1.3 Drawings

The drawings used in the study for the single-detached dwelling include :

1) Basement/Foundation plan & Main/Upper floor plan
2) Building elevations
3) Building sections & specifications

These drawings are included in the Appendix.

1.4 Approach

The building construction costs are detailed in the report under the headings of labour and material/equipment costs. Labour rates used in the report are either those established by the trade union concerned, or by the market where trade union rates do not apply. In most cases, a realistic assessment of labour rates has been established by examining the circumstances of the particular sub-trade within the building industry. Material prices have been evaluated from building materials suppliers' lists. Average discounts are applied in order to establish a realistic market price for the materials to contractors.

In previous years, the single-detached dwelling studied had been a bungalow 100 m2 (1,076 S.F.). The model analysed in 1988 is a 4-level split, 151 m2 (1625 S.F.) complete with a double attached garage, and finished on three levels, which is more representative of current housing construction than is the bungalow.

In order to compare costs and show a trend from previous years studies, previous years costs had to be adjusted to reflect the new model. Accordingly, costs for the previous years model were estimated concurrently with costs for the revised plan. It was found that costs per square foot were 6 percent higher on the 4-level split than the bungalow, reflecting the additional complexity and features of the new plan. Previous years costs were then recalculated by increasing the cost per square foot identified in previous years for the bungalow by

1.0 INTRODUCTION

Approach (continued)

6 percent and applying this to the square footage of the new model. Costs are compared in the tables and graphs contained in this report.

The cost data are assembled by sub-trade and presented in 21 trade categories. The sub-trade operations are combined within each trade category in order to reflect current estimating practice within the industry.

A computer program was developed in order to collate and present the cost data which were assembled for the ten centres. The quantities and trade descriptions were initially established for the prototypical house and apartment building. The cost data applicable to the relevant quantities and trade descriptions for each centre were then processed by computer.

The cost effects of market forces and building industry conditions are addressed in the 'Commentary' section of this report.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 1 : Total Building Costs

ITEM	EDMONTON		CALGARY		RED DEER		FORT McMURRAY		GRANDE PRAIRIE		HINTON		LETHBRIDGE		MEDICINE HAT		LLOYDMINSTER		PEACE RIVER *	
ELEMENT	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%
Labour	20,063	28.0	22,089	28.7	21,306	28.1	24,554	28.8	22,973	28.3	22,587	28.8	21,291	28.0	21,187	27.8	20,867	27.3	23,427	28.5
Material	51,603	72.0	54,762	71.3	54,448	71.9	60,583	71.2	58,077	71.7	55,955	71.2	54,740	72.0	55,045	72.2	55,534	72.7	58,653	71.5
Total 1988	71,666	100.0	76,851	100.0	75,754	100.0	85,137	100.0	81,050	100.0	78,542	100.0	76,031	100.0	76,232	100.0	76,401	100.0	82,080	100.0
Cost per m2	$474.61		$508.95		$501.68		$563.82		$536.75		$520.15		$503.52		$504.85		$505.97		$543.58	
Cost per SF	$44.09		$47.28		$46.61		$52.38		$49.87		$48.32		$46.78		$46.90		$47.01		$50.50	
1987 Split - Level **	$41.49		$45.90		$45.15		$51.76		$47.91		$46.69		$44.01		$44.40		$46.10		-	
Total 1987 **	$67,421		$74,588		$73,369		$84,110		$77,854		$75,871		$71,516		$72,150		$74,913		-	
Changes From 1987	6.3%		3.0%		3.3%		1.2%		4.1%		3.5%		6.3%		5.7%		2.0%		-	

* Peace River was not included in previous years studies.

** Adjusted to apply to the split-level model used in the 1988 study instead of the bungalow as studied in previous years reports.

Note : Several total figures may appear in this report as not being added correctly. This is due to the rounding effect in the calculations of the detail costing for each centre.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 2 : Comparative Cost Ratios *

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
EDMONTON	1.00	1.07	1.06	1.19	1.13	1.10	1.06	1.06	1.07	1.15
CALGARY	0.93	1.00	0.99	1.11	1.06	1.02	0.99	0.99	0.99	1.07
RED DEER	0.95	1.01	1.00	1.12	1.07	1.04	1.00	1.01	1.01	1.08
FORT McMURRAY	0.84	0.90	0.89	1.00	0.95	0.92	0.89	0.90	0.90	0.96
GRANDE PRAIRIE	0.88	0.95	0.94	1.05	1.00	0.97	0.94	0.94	0.94	1.01
HINTON	0.91	0.98	0.97	1.08	1.03	1.00	0.97	0.97	0.97	1.05
LETHBRIDGE	0.94	1.01	1.00	1.12	1.07	1.03	1.00	1.00	1.01	1.08
MEDICINE HAT	0.94	1.01	0.99	1.12	1.06	1.03	1.00	1.00	1.00	1.08
LLOYD-MINSTER	0.94	1.01	0.99	1.11	1.06	1.03	1.00	1.00	1.00	1.07
PEACE RIVER	0.87	0.94	0.92	1.04	0.99	0.96	0.93	0.93	0.93	1.00

* Entries refer to the ratio of the price for a city in the top row of the table divided by a price for the city listed in the column. For example, Red Deer costs are 1.06 times Edmonton costs.

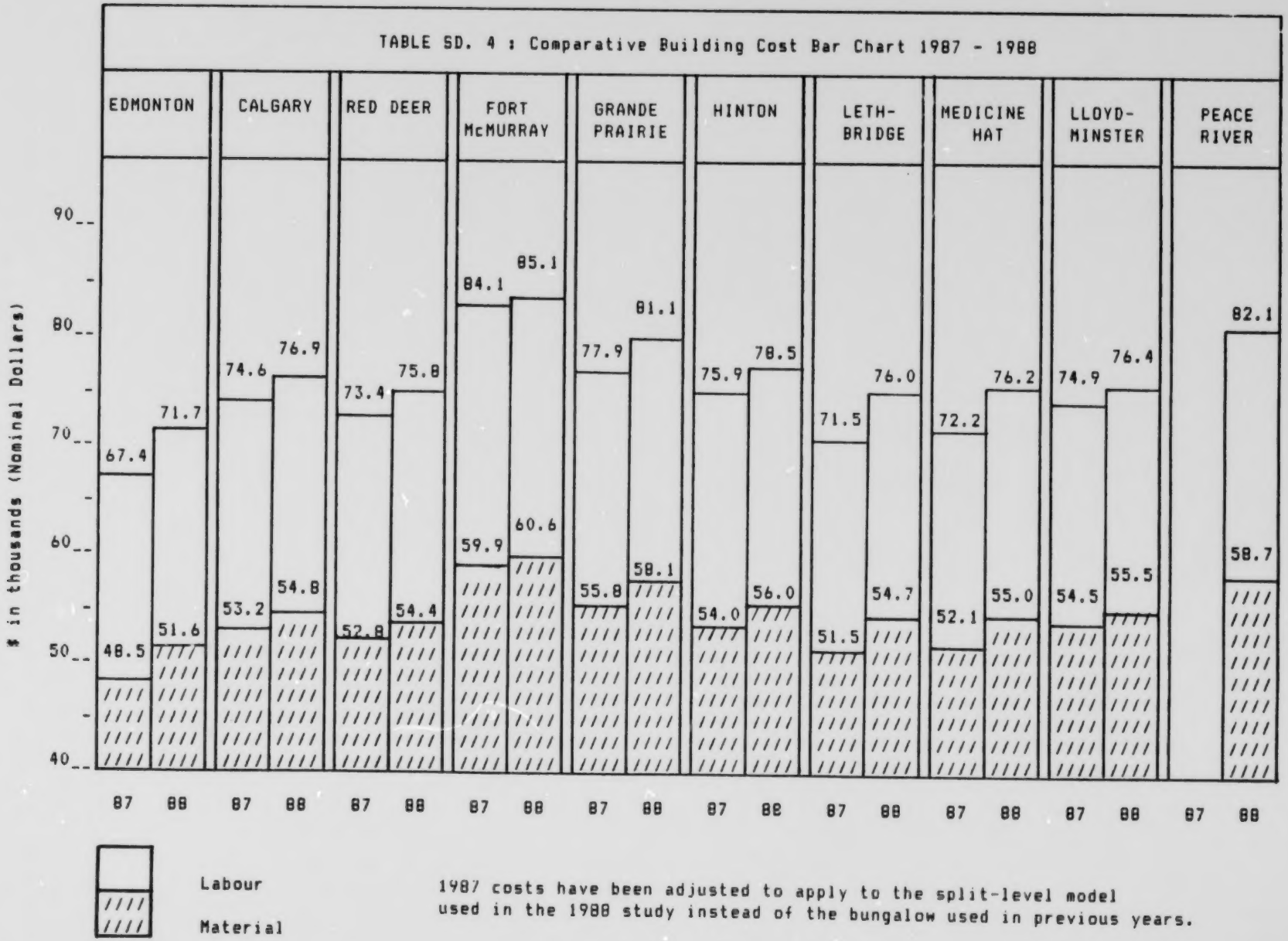
2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 3 : Comparative Cost Table 1987 - 1988

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Labour Cost										
1988	$20,063	$22,089	$21,306	$24,554	$22,973	$22,587	$21,291	$21,187	$20,867	$23,427
1987 *	$18,878	$21,407	$20,617	$24,224	$22,033	$21,851	$20,024	$20,058	$20,451	NA
Difference	1185	682	689	330	940	736	1267	1129	416	NA
% Difference	6.3%	3.2%	3.3%	1.4%	4.3%	3.4%	6.3%	5.6%	2.0%	NA
Mat'l Cost										
1988	$51,603	$54,762	$54,448	$60,583	$58,077	$55,955	$54,740	$55,045	$55,534	$58,653
1987 *	$48,543	$53,181	$52,752	$59,886	$55,821	$54,020	$51,492	$52,092	$54,462	NA
Difference	3060	1581	1696	697	2256	1935	3248	2953	1072	NA
% Difference	6.3%	3.0%	3.2%	1.2%	4.0%	3.6%	6.3%	5.7%	2.0%	NA
Total Cost										
1988	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080
1987 *	$67,421	$74,588	$73,369	$84,110	$77,854	$75,871	$71,516	$72,150	$74,913	NA
Difference	4245	2263	2385	1027	3196	2671	4515	4082	1488	NA
% Difference	6.3%	3.0%	3.3%	1.2%	4.1%	3.5%	6.3%	5.7%	2.0%	NA

* Cost adjusted to apply to the split level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE - DETACHED DWELLING



1987 costs have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 5 : Comparative Total Building Costs 1980 -1988 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER	**** PEACE RIVER
1980	$62,391	$57,979	$55,947	$59,530	$73,206	$67,436	-	$60,890	$61,752	-	-
1981	$67,692	$63,888	$63,336	$64,249	$77,357	$71,449	-	$67,057	$66,506	-	-
1982	$65,632	$60,374	$59,030	$64,697	$74,016	$65,145	$67,935	$66,489	$67,367	-	-
1983	$61,713	$57,170	$55,930	$59,116	$68,848	$64,732	$63,491	$61,493	$62,923	-	-
1984	$63,646	$57,256	$56,877	$58,496	$72,242	$68,194	$66,316	$62,010	$63,629	$67,798	-
1985	$64,852	$59,633	$59,754	$61,407	$72,913	$68,469	$66,661	$63,181	$63,250	$68,400	-
1986	$67,405	$62,079	$61,803	$63,733	$76,445	$71,932	$70,209	$65,231	$65,524	$69,692	-
1987	$74,644	$67,421	$74,588	$73,369	$84,110	$77,854	$75,871	$71,516	$72,150	$74,913	-
1988	$77,974	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080

Notes :
- * Expressed in nominal dollars
- ** Hinton was not included in the 1980 and 1981 studies
- *** Lloydminster was not included in the 1980 through 1983 studies
- **** Peace River was not included in the 1980 through 1987 studies
- >>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

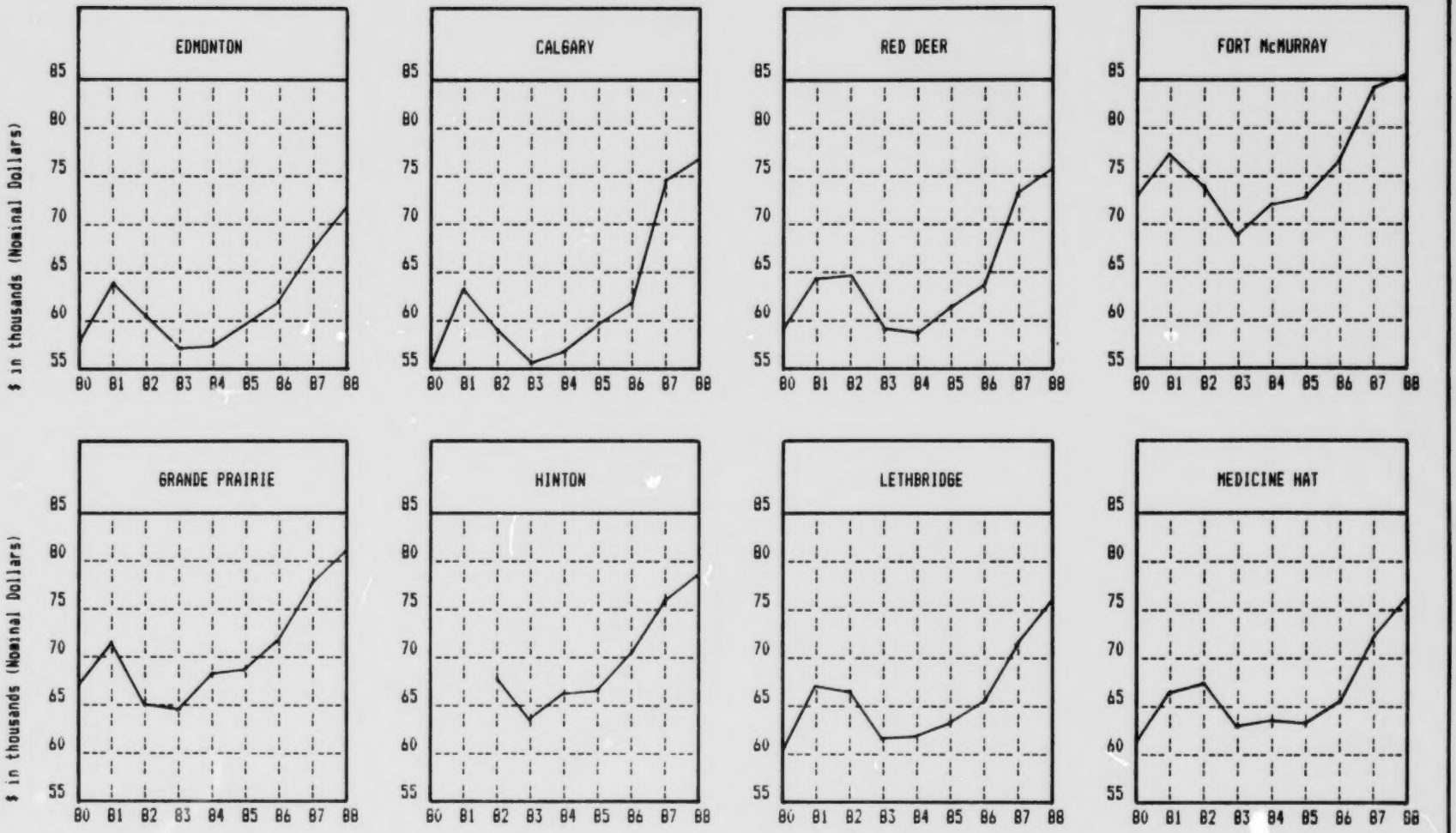
TABLE SD. 6 : Comparative Cost per Square Foot of Gross Floor Area 1980 - 1988 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER	**** PEACE RIVER
1980	$38.39	$35.68	$34.43	$36.63	$45.05	$41.50	-	$37.47	$38.00	-	-
1981	$41.66	$39.32	$38.98	$39.54	$47.60	$43.97	-	$41.27	$40.93	-	-
1982	$40.39	$37.15	$36.33	$39.81	$45.55	$40.09	$41.81	$40.92	$41.46	-	-
1983	$37.98	$35.18	$34.42	$36.38	$42.37	$39.83	$39.07	$37.84	$38.72	-	-
1984	$39.17	$35.23	$35.00	$36.00	$44.46	$41.97	$40.81	$38.16	$39.16	$41.72	-
1985	$39.91	$36.70	$36.77	$37.79	$44.87	$42.14	$41.02	$38.88	$38.92	$42.09	-
1986	$41.48	$38.20	$38.03	$39.22	$47.04	$44.27	$43.21	$40.14	$40.32	$42.89	-
1987	$45.93	$41.49	$45.90	$45.15	$51.76	$47.91	$46.69	$44.01	$44.40	$46.10	-
1988	$47.97	$44.09	$47.28	$46.61	$52.38	$49.87	$48.32	$46.78	$46.90	$47.01	$50.50

Notes :
- * Expressed in nominal dollars
- ** Hinton was not included in the 1980 and 1981 studies
- *** Lloydminster was not included in the 1980 through 1983 studies
- **** Peace River was not included in the 1980 through 1987 studies
- >>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

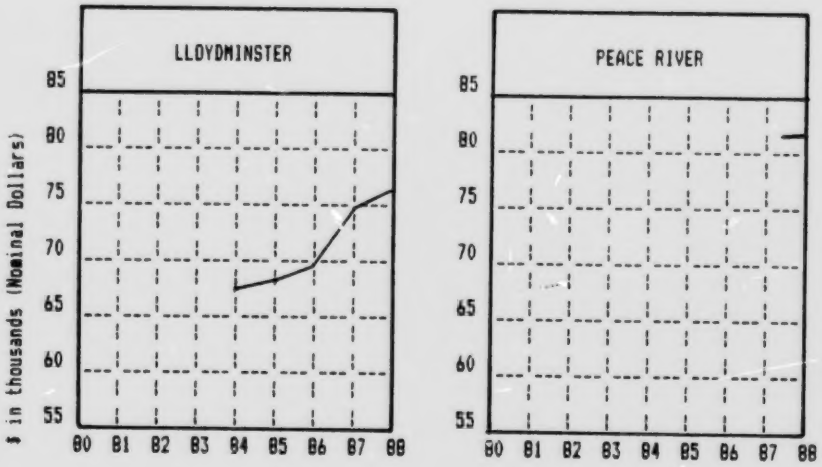
TABLE SD. 7 : Comparative Total Cost Graphs 1980 -1988



Note: Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 7 : Comparative Total Cost Graphs 1980 -1988 (Continued)



* Peace River not included in previous studies.

Note: Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 8 : Comparative Total Building Costs 1980 -1988 (Inflation Adjusted Dollars) *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER	**** PEACE RIVER
1980	$96,208	$89,404	$86,270	$91,795	$112,864	$103,986	-	$93,892	$95,222	-	-
1981	$92,264	$87,079	$86,327	$87,571	$105,438	$97,385	-	$91,399	$90,648	-	-
1982	$80,924	$74,441	$72,784	$79,771	$91,262	$80,324	$83,764	$81,981	$83,064	-	-
1983	$70,538	$65,345	$63,928	$67,570	$78,693	$73,989	$72,570	$70,287	$71,921	-	-
1984	$72,748	$65,444	$65,010	$66,861	$82,573	$77,946	$75,799	$70,877	$72,728	$77,493	-
1985	$72,115	$66,312	$66,446	$68,285	$81,079	$76,138	$74,127	$70,257	$70,334	$76,061	-
1986	$72,124	$66,425	$66,129	$68,194	$81,796	$76,967	$75,124	$69,797	$70,111	$74,570	-
1987	$76,883	$69,444	$76,826	$75,570	$86,633	$80,190	$78,147	$73,661	$74,315	$77,160	-
1988	$77,974	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080

Notes :

* 1. Expressed in 1988 Inflation adjusted dollars
2. Inflation adjustments have been based on the Consumer Price Index for Edmonton and Calgary.

** Hinton was not included in the 1980 and 1981 studies

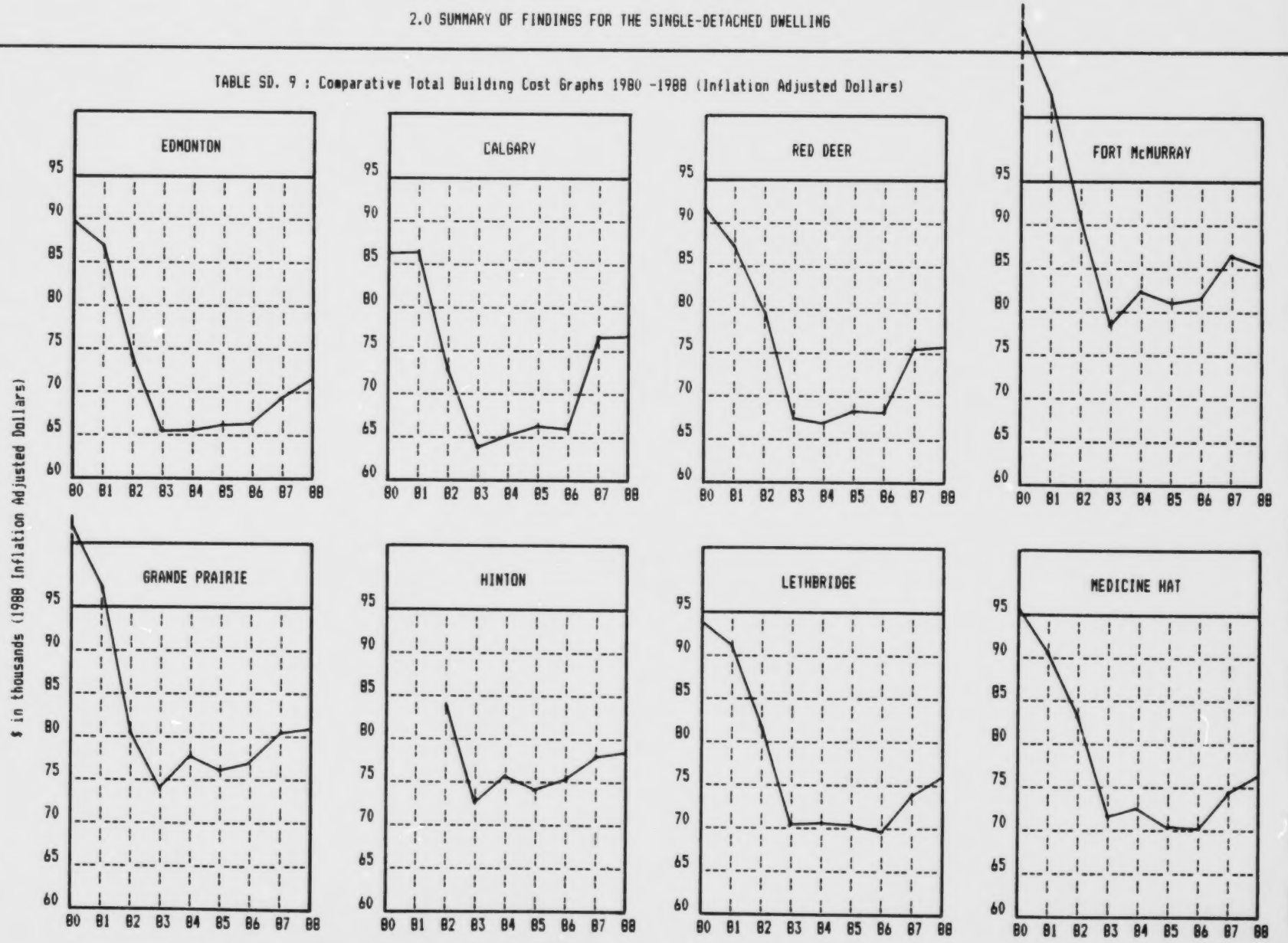
*** Lloydminster was not included in the 1980 through 1983 studies

**** Peace River was not included in the 1980 through 1987 studies

>>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

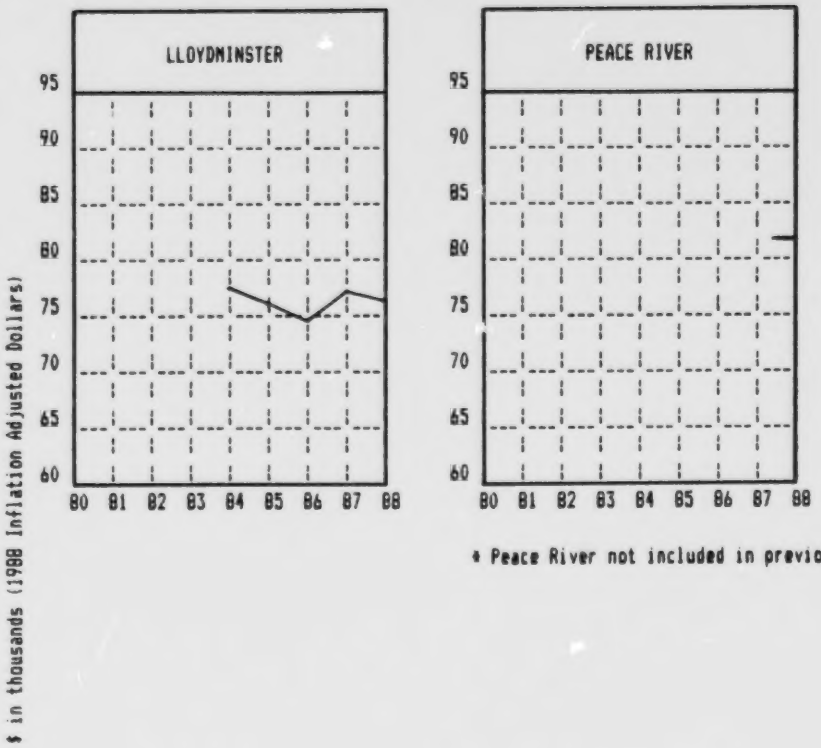
TABLE SD. 9 : Comparative Total Building Cost Graphs 1980 -1988 (Inflation Adjusted Dollars)



Note: Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 9 : Comparative Total Building Cost Graphs 1980 -1988 (Inflation Adjusted Dollars)



* Peace River not included in previous studies.

Note: Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 10 : Trade Division Cost Summaries

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Divisions										
1. Excavation	2,642	3,309	3,329	3,726	3,076	2,874	3,277	2,995	3,445	3,098
2. Concrete	9,158	9,469	9,624	11,452	10,991	10,966	9,855	10,540	10,196	10,230
3. Damproofing	376	454	474	618	582	463	470	456	445	582
4. Siding	5,248	5,484	5,950	6,128	5,939	5,480	5,321	5,302	5,594	6,073
5. Roofing	1,713	1,857	1,836	1,840	1,889	1,670	1,744	1,790	1,574	1,960
6. Rough Carpentry	12,916	13,660	12,962	15,324	14,107	14,158	13,725	12,688	12,949	14,445
7. Finish Carpentry	1,929	2,084	1,914	2,186	2,006	1,923	1,944	1,911	1,956	2,091
8. Windows and Glazing	2,481	2,526	2,588	2,726	2,696	2,481	2,474	2,526	2,544	2,845
9. Sealants	59	73	63	67	68	60	59	62	60	68
10. Doors	3,074	3,182	3,257	3,565	3,593	3,355	3,221	3,195	3,352	3,660
11. Hardware	386	407	390	434	406	393	418	408	396	411
SUB - TOTAL	$39,982	$42,505	$42,387	$48,066	$45,353	$43,823	$42,508	$41,873	$42,511	$45,463

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 10 : Trade Division Cost Summaries (cont'd)

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Divisions										
13. Wallboard	4,978	5,461	5,013	6,184	5,779	5,658	5,193	5,219	5,626	5,856
14. Flooring	3,253	3,460	3,399	3,490	3,687	3,341	3,275	3,465	3,374	3,781
15. Painting	2,192	2,414	2,366	2,693	2,659	2,518	2,568	2,575	2,524	2,676
16. Fittings	3,990	4,262	4,248	4,831	4,407	4,322	4,535	4,428	4,304	4,814
17. Specialties	540	576	550	607	598	553	584	584	557	613
18. Appliances	106	123	111	131	132	117	128	128	120	132
19. Plumbing	5,350	5,950	5,650	6,260	5,925	5,790	5,360	5,475	5,350	6,125
20. Heating	2,400	2,670	2,690	3,245	3,060	2,960	2,460	2,840	2,730	3,170
21. Electrical	3,375	3,930	3,840	4,130	3,950	3,960	3,920	4,145	3,805	3,950
22. Site Over-head	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
TOTAL	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080

3.0 COMMENTARY

3.0 COMMENTARY

3.1 General

Alberta's economy experienced improvement in the first half of 1988. There was a positive migration of people into Alberta. Construction activity in the Province increased and the unemployment rate was down compared to the year previous. Increased housing starts province-wide proved indicative of a stabilizing economy. Timber pulp and paper projects have generated some activity, but the largest part of the impacts from these projects has yet to come. Most areas of the Province have seen upward movement of housing prices although weaker performances took place in smaller communities. Lot prices are up in most of the centres studied as a result of a reduced supply of lower priced lots.

Costs for the prototypical single-detached house have increased by an average of 3.5% province-wide. The greatest increase was 6.3% shared by Edmonton and Lethbridge, and the lowest was 1.2% in Fort McMurray.

The graphic presentation of construction costs of the single-detached dwelling in Table SD.7 indicates that construction costs in all centres have moved above 1981 nominal dollars (from an average 1981 cost of $ 67,692 to an average 1988 cost of $ 77,974 or 15.2% more. However, expressed in terms of inflation adjusted 1988 dollars, costs are still 15.5% below the 1981 average of $ 92,264 at $ 77,974 .

Labour costs for the single-detached dwelling increased substantially in Edmonton and in Lethbridge as both centres have experienced shortages of skilled labour. Other centres have also experienced some skilled labour shortage problems, but to a much lesser degree.

3.0 COMMENTARY

3.1 General (continued)

Material prices for the single-detached dwelling have increased in all centres, however, some prices used in this report may reflect seasonal adjustment such as the exclusion of costs of heating for concrete pouring in the winter and also greater discounting offered by suppliers for the time of year studied. Most materials have also increased in price in response to the overall high demand caused by the higher housing starts in the Province. Concrete prices continue to vary considerably from centre to centre, due to demand, location and availability of aggregates and cement. In most centres the majority of price increases were passed on to consumers ; in previous years, builders have absorbed increases to remain competitive in the marketplace.

No significant changes were observed as a result of building practice changes or changes in standard materials used by the majority of builders.

3.0 COMMENTARY

3.2 Highlights by Centre

Edmonton :

The 1988 cost of the typical house in Edmonton is 6.8% lower than its Calgary counterpart and 6.3% higher than the 1987 Edmonton cost. Expressed in nominal dollars, the total cost is higher than the 1981 cost by 12.2%. Expressed in inflation adjusted 1988 dollars, the total cost is 17.7% less than the 1981 cost.

Shortages of skilled labour in Edmonton have forced prices to rise. Higher profit margins are being realized for some builders as they are experiencing a healthier marketplace. Edmonton's resale market is very active and housing starts increased substantially. A very limited supply of lower priced lots exist.

Calgary :

The 1988 cost of the typical house in Calgary is 7.2% higher than it's Edmonton counterpart and 3.0% higher than the 1987 Calgary cost. Expressed in nominal dollars, the total cost is higher than the 1981 cost by 21.3% . Expressed in inflation adjusted 1988 dollars, the total cost is 11.0% less than the 1981 cost.

Shortages of skilled labour in Calgary pushed costs upwards. Optimism remained as oil prices edged higher. Housing starts are up significantly and few lower priced lots exist.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Red Deer :

The 1988 cost of the typical house in Red Deer is 1.4% lower than the Calgary cost, 5.7% higher than Edmonton cost, and 3.3% higher than the 1987 Red Deer cost. Expressed in nominal dollars, the total cost is 17.9% higher than the 1981 cost. Expressed in inflation adjusted 1988 dollars, the total cost is 13.5% less than the 1981 cost.

Some shortages of skilled labour are evident in Red Deer. Labour costs are up in a stablized market for new housing. Lot prices have increased significantly over the previous year.

Fort McMurray :

The 1988 cost of the typical house in Fort McMurray is 18.8% higher than that in Edmonton and 1.2% higher than the 1987 Fort McMurray cost. Expressed in nominal dollars, the total cost is 10.1% more than the 1981 cost. Expressed in inflation adjusted 1988 dollars, the total cost is 19.3% less than the 1981 cost.

Fort McMurray has experienced levels of new construction activity similar to the previous year. Lot prices have generally remained unchanged for 1988. There have been recent indications that activity here is improving.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Grande Prairie :

The 1988 cost of the typical house in Grande Prairie is 13.1% higher than in Edmonton, and 4.1% higher than the 1987 Grande Prairie cost. Expressed in nominal dollars, the total cost is 13.4% higher than 1981 cost. Expressed in inflation adjusted 1988 dollars, the total cost is 16.8% less than the 1981 cost.

Grande Prairie has experienced a positive migration of people into the centre and pressure from demands for new housing is moving costs upwards. There isn't an immediate shortage of skilled labour at present, but builders expect this by the spring/summer of 1989.

Hinton :

The 1988 cost of the typical house in Hinton is 9.6% higher than in Edmonton and 3.5% higher than the 1987 Hinton cost. Expressed in nominal dollars, the total cost is 15.6% higher than the 1982* cost. Expressed in inflation adjusted 1988 dollars, the total cost is 6.2% less than the 1982* cost.

Of the ten centres examined, Hinton is the smallest. Apart from the premiums on materials, skilled labour is not as readily available as elsewhere. Therefore, it is often necessary to pay certain skilled trades, such as mechanical and electrical, subsistence in the form of accommodation and travel allowances.

Hinton had very few new homes built in 1988. Local industrial activity is keeping local builders/trades busy at present.

* 1982 has been selected as the base year as Hinton was not part of earlier studies.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Lethbridge :

The 1988 cost of the typical house in Lethbridge is 1.1% lower than in Calgary and 6.3% higher than the 1987 Lethbridge cost. Expressed in nominal dollars, the total cost is 13.4% higher than the 1981 cost. Expressed in inflation adjusted 1988 dollars, the total cost is 16.8% less than the 1981 cost.

Lethbridge has experienced a competitive market through 1988. Along with higher material costs, builders are having to pay skilled labour more. Housing starts here are up slightly over the year previously.

Medicine Hat :

The 1988 cost of the typical house in Medicine Hat is 0.8% less than in Calgary and 5.7% higher than the 1987 Medicine Hat cost. Expressed in nominal dollars, the total cost is 14.6% more than the 1981 cost. Expressed in inflation adjusted 1988 dollars, the total cost is 15.9% less than the 1981 cost.

As with Lethbridge, builders here have had to pay more for skilled labour, along with higher material costs. A very competitive marketplace exists and there is a low supply of housing available.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Lloydminster :

The 1988 cost of the typical house in Lloydminster is 6.6% higher than in Edmonton and 2.0% higher than the 1987 Lloydminster cost. Expressed in nominal dollars, the total cost is 12.7% higher than the 1984* cost. Expressed in inflation adjusted 1988 dollars, the total cost is 1.4% less than the 1984 cost.

Lloydminster experienced a similar level of activity as the year previous with few new housing starts. The local oil upgrader project has not created any immediate impact on the area.

* 1984 has been selected as the base year as Lloydminster was not part of the earlier studies.

Peace River :

The 1988 cost of the typical house in Peace River is 14.5% higher than in Edmonton. This year is the first time that Peace River has been included in the Alberta House Cost Comparison Study.

Builders have indicated that activity had been similar to the year previous and relatively costs have generally remained unchanged. Trade availability is adequate at present, but is expected to change as the local pulp mill project develops and higher demand for new housing is created.

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE

DETAILED COST ESTIMATES FOR EDMONTON

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.47	140	0.84	249	1.31	389
1.11	Excavate trench for garage grade beam.	4	m3	3.14	13	6.20	25	9.34	37
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.91	67	1.36	101	2.27	168
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.23	81	6.60	165	9.83	246
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.89	146	0.32	52	1.21	198
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.19	1,603	7.19	1,603
	SUBTOTAL - EXCAVATION	17.50	/m2 GFA		446		2,196		2,642
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	89.70	1,704	89.70	1,704

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	89.70	90	89.70	90
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.50	284	31.40	659	44.90	943
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.80	209	0.80	209
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.80	29	0.80	29
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.20	89	1.20	89
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	26.65	1,066	11.15	446	37.80	1,512
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.30	242	4.52	118	13.82	359
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.56	320	6.37	573	9.93	894
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.48	332	9.25	685	13.73	1,016

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	23.00	23	220.00	220	243.00	243
2.60	Parging to concrete walls.	10	m2	9.10	91	2.98	30	12.08	121
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	550.00	550	1,400.00	1,400	1,950.00	1,950
	SUBTOTAL - CONCRETE	60.65	/m2 GFA		2,907		6,251		9,158
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.30	38	0.30	38	0.60	76
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	2.79	126	3.86	174	6.65	299
	SUBTOTAL - DAMPROOFING	2.49	/m2 GFA		164		212		376

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	4.74	706	13.78	2,053	18.52	2,759
4.20	Prefinished perforated aluminum soffit.	44	m2	3.90	172	9.80	431	13.70	603
4.30	Prefinished aluminum fascia.	70	m	0.80	56	2.30	161	3.10	217
4.40	Brick facing to front elevation.	20	m2	43.74	875	39.68	794	83.42	1,668
	SUBTOTAL - SIDING	34.75	/m2 GFA		1,809		3,439		5,248
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.55	459	4.41	794	6.96	1,253
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.35	135	3.25	325	4.60	460
	SUBTOTAL - ROOFING	11.34	/m2 GFA		594		1,119		1,713

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	411.39	3,456	411.39	3,456
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	561.89	1,349	561.89	1,349
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	6.60	2,323	6.60	2,323
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	4.99	843	4.99	843
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	25.33	3,825	0.00	0	25.33	3,825
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.42	24	0.87	49	1.29	72

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.05	14	13.00	26	20.05	40
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	429.00	429	580.00	580	1,009.00	1,009
	SUBTOTAL - CARPENTRY (ROUGH)		85.54	/m2 GFA		4,291		8,625		12,916
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	75.00	75	60.00	60	135.00	135
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	77.00	77	75.00	75	152.00	152
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	78.00	78	88.00	88	166.00	166
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.20	17	7.78	31	11.98	48

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	55.00	110	120.00	240	175.00	350
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.50	542	1.14	412	2.64	953
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	37.50	75	62.50	125
	SUBTOTAL - CARPENTRY (FINISH)	12.77	/m2 GFA		948		981		1,929
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	533.00	533	533.00	533
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	232.00	1,392	232.00	1,392
	- 900 x 1550 mm	2	No.	0.00	0	278.00	556	278.00	556
	SUBTOTAL - WINDOWS AND GLAZING	16.43	/m2 GFA		0		2,481		2,481

1988 ALBERTA HOUSE COST COMPARISON STUDY — SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.20	22	0.11	12	0.31	34
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.07	16	0.59	9	1.66	25
SUBTOTAL - SEALANTS	0.39	/m2 GFA		38		21		59
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	22.00	22	275.00	275	297.00	297
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	22.00	22	149.00	149	171.00	171
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	60.00	60	900.00	900	960.00	960
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	100.00	100	519.00	519	619.00	619

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	11.25	11	38.99	39	50.24	50
- 711 x 2080 mm	3	No.	11.25	34	38.99	117	50.24	151
- 762 x 2080 mm	6	No.	11.25	68	38.99	234	50.24	301
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	9.50	10	36.99	37	46.49	46
- 1220 x 2080 mm	3	No.	9.50	29	63.98	192	73.48	220
- 1320 x 2080 mm	1	No.	9.50	10	68.98	69	78.48	78
- 1524 x 2080 mm	1	No.	9.50	10	73.98	74	83.48	83
- 1830 x 2080 mm	1	No.	9.50	10	85.98	86	95.48	95
SUBTOTAL - DOORS	20.36	/m2 GFA		383		2,691		3,074
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	15.40	31	28.99	58	44.39	89
11.20 Security deadbolt.	1	No.	15.40	15	30.99	31	46.39	46
11.30 Latch sets.	7	sets	7.60	53	12.99	91	20.59	144
11.40 Bathroom privacy latch sets.	3	sets	7.60	23	14.99	45	22.59	68
11.60 Door stops.	11	No.	1.90	21	1.65	18	3.55	39
SUBTOTAL - HARDWARE	2.56	/m2 GFA		143		243		386

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.46	1,557	1.98	1,253	4.44	2,811
13.40 Finish to ceilings - textured.	138	m2	1.18	163	1.10	152	2.28	315
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.85	145	4.20	714	5.05	859
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.27	113	5.74	511	7.01	624
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.27	70	0.32	83	0.59	153
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.27	18	0.22	15	0.49	33
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.56	38	2.15	146	2.71	184
SUBTOTAL - WALLBOARD	32.97	/m2 GFA		2,104		2,874		4,978

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	5.73	120	11.94	251	17.67	371
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.30	350	23.89	2,532	27.19	2,882
SUBTOTAL - FLOORING	21.54	/m2 GFA		470		2,783		3,253
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.01	32	1.20	10	5.21	42
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	61.00	61	19.99	20	80.99	81
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.01	84	1.20	25	5.21	109
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	1.80	812	0.66	298	2.46	1,109
15.30 Two coats semigloss on internal doors and frames.	10	No.	20.00	200	5.98	60	25.98	260
15.35 Two coats semigloss on bi-fold doors.	7	No.	26.30	184	7.74	54	34.04	238

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.80	154	0.20	39	1.00	193
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.80	3	0.20	1	1.00	4
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.50	5	1.05	2	3.55	7
15.43 Stain finish to cedar deck.	14	m2	2.86	40	0.78	11	3.64	51
15.44 Stain finish to deck handrail and balustrade.	16	m	4.50	72	1.56	25	6.06	97
SUBTOTAL - PAINTING	14.52	/m2 GFA		1,648		544		2,192
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.65	73	5.40	108	9.05	181
16.20 Vanities and base cabinets.	7	m	32.50	228	373.00	2,611	405.50	2,839
16.21 Kitchen wall cabinets.	4	m	32.50	130	210.00	840	242.50	970
SUBTOTAL - FITTINGS	26.42	/m2 GFA		431		3,559		3,990

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.05	45	8.80	79	13.85	125
17.20 Medicine cabinets	2	No.	9.85	20	58.95	118	68.80	138
17.25 Mirrors	2	No.	9.85	20	75.00	150	84.85	170
17.30 25 mm dia. chrome shower curtain rods.	2	No.	5.45	11	6.49	13	11.94	24
17.40 Mail box and house numbers	1	set	5.45	5	29.98	30	35.43	35
17.50 18 mm dia. chrome coat rods.	6	No.	3.30	20	4.81	29	8.11	49
SUBTOTAL - SPECIALTIES	3.58	/m2 GFA		121		419		540
18. APPLIANCES								
18.10 Range hood	1	No.	16.00	16	89.99	90	105.99	106
SUBTOTAL - APPLIANCES	0.70	/m2 GFA		16		90		106

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,050.00	2,050	3,300.00	3,300	5,350.00	5,350
SUBTOTAL - PLUMBING	35.43	/m2 GFA		2,050		3,300		5,350
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	600.00	600	1,800.00	1,800	2,400.00	2,400
SUBTOTAL - HEATING	15.89	/m2 GFA		600		1,800		2,400

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	900.00	900	1,525.00	1,525	2,425.00	2,425
SUBTOTAL - ELECTRICAL	22.35	/m2 GFA		900		2,475		3,375
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - EDMONTON	474.61	/m2 GFA		$20,063		$51,603		$71,666

DETAILED COST ESTIMATES FOR CALGARY

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.54	160	1.80	535	2.34	695
1.11	Excavate trench for garage grade beam.	4	m3	3.30	13	7.60	30	10.90	44
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.93	69	1.78	132	2.71	201
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.64	91	14.16	354	17.80	445
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.92	151	0.32	52	1.24	203
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.72	1,722	7.72	1,722
	SUBTOTAL - EXCAVATION	21.91	/m2 GFA		484		2,825		3,309
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	83.42	1,585	83.42	1,585

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	83.42	83	83.42	83
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	18.00	378	30.80	647	48.80	1,025
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.85	222	0.85	222
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.85	31	0.85	31
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.30	96	1.30	96
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	26.97	1,079	12.27	491	39.24	1,570
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.41	245	4.98	129	14.39	374
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.90	351	6.12	551	10.02	902
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.93	365	8.65	640	13.58	1,005

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.00	25	225.00	225	250.00	250
2.60	Parging to concrete walls.	10	m2	9.74	97	3.35	34	13.09	131
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	595.00	595	1,600.00	1,600	2,195.00	2,195
	SUBTOTAL - CONCRETE	62.71	/m2 GFA		3,135		6,334		9,469
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.41	52	0.35	44	0.76	97
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.92	176	4.04	182	7.96	358
	SUBTOTAL - DAMPROOFING	3.01	/m2 GFA		228		226		454

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	5.13	764	14.35	2,138	19.48	2,903
4.20	Prefinished perforated aluminum soffit.	44	m2	4.26	187	9.86	434	14.12	621
4.30	Prefinished aluminum fascia.	70	m	0.92	64	2.48	174	3.40	238
4.40	Brick facing to front elevation.	20	m2	47.26	945	38.85	777	86.11	1,722
	SUBTOTAL - SIDING	36.32	/m2 GFA		1,961		3,523		5,484
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.88	518	4.41	794	7.29	1,312
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.85	185	3.60	360	5.45	545
	SUBTOTAL - ROOFING	12.30	/m2 GFA		703		1,154		1,857

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	446.27	3,749	446.27	3,749
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	599.60	1,439	599.60	1,439
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	6.99	2,460	6.99	2,460
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	4.99	843	4.99	843
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	26.37	3,982	0.00	0	26.37	3,982
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.42	24	0.87	49	1.29	72

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.22	14	15.00	30	22.22	44
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	460.00	460	610.00	610	1,070.00	1,070
	SUBTOTAL - CARPENTRY (ROUGH)		90.46	/m2 GFA		4,480		9,180		13,660
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	80.00	80	64.00	64	144.00	144
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	82.00	82	80.00	80	162.00	162
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	83.00	83	94.00	94	177.00	177
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.30	17	8.14	33	12.44	50

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	58.00	116	130.00	260	188.00	376
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.60	578	1.28	462	2.88	1,040
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	27.25	55	40.50	81	67.75	136
	SUBTOTAL - CARPENTRY (FINISH)	13.80	/m2 GFA		1,010		1,074		2,084
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	540.00	540	540.00	540
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	237.00	1,422	237.00	1,422
	- 900 x 1550 mm	2	No.	0.00	0	282.00	564	282.00	564
	SUBTOTAL - WINDOWS AND GLAZING	16.73	/m2 GFA		0		2,526		2,526

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.28	31	0.15	16	0.43	47
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.17	18	0.60	9	1.77	27
SUBTOTAL - SEALANTS	0.48	/m2 GFA		48		25		73
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	24.50	25	280.00	280	304.50	305
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	24.50	25	155.00	155	179.50	180
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	64.00	64	960.00	960	1,024.00	1,024
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	100.00	100	527.00	527	627.00	627

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.50	13	38.99	39	51.49	51
- 711 x 2080 mm	3	No.	12.50	38	38.99	117	51.49	154
- 762 x 2080 mm	6	No.	12.50	75	38.99	234	51.49	309
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.50	11	36.99	37	47.49	47
- 1220 x 2080 mm	3	No.	10.50	32	63.98	192	74.48	223
- 1320 x 2080 mm	1	No.	10.50	11	68.98	69	79.48	79
- 1524 x 2080 mm	1	No.	10.50	11	73.98	74	84.48	84
- 1830 x 2080 mm	1	No.	10.50	11	85.98	86	96.48	96
SUBTOTAL - DOORS	21.07	/m2 GFA		412		2,770		3,182
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.00	32	28.99	58	44.99	90
11.20 Security deadbolt.	1	No.	16.00	16	31.65	32	47.65	48
11.30 Latch sets.	7	sets	9.00	63	12.99	91	21.99	154
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	14.99	45	23.99	72
11.60 Door stops.	11	No.	2.25	25	1.65	18	3.90	43
SUBTOTAL - HARDWARE	2.70	/m2 GFA		163		244		407

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.89	1,829	2.04	1,291	4.93	3,121
13.40 Finish to ceilings - textured.	138	m2	1.24	171	1.19	164	2.43	335
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.08	184	4.41	750	5.49	933
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.30	116	5.80	516	7.10	632
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.34	88	0.32	83	0.66	171
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.28	19	0.22	15	0.50	34
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.71	48	2.74	186	3.45	235
SUBTOTAL - WALLBOARD	36.17	/m2 GFA		2,455		3,006		5,461

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.04	127	12.40	260	18.44	387
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.78	401	25.20	2,671	28.98	3,072
SUBTOTAL - FLOORING	22.91	/m2 GFA		528		2,932		3,460
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.28	34	1.24	10	5.52	44
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	63.00	63	20.99	21	83.99	84
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.25	89	1.24	26	5.49	115
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.14	965	0.67	302	2.81	1,267
15.30 Two coats semigloss on internal doors and frames.	10	No.	20.80	208	6.28	63	27.08	271
15.35 Two coats semigloss on bi-fold doors.	7	No.	27.20	190	7.74	54	34.94	245

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.92	178	0.21	41	1.13	218
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.92	4	0.21	1	1.13	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.65	5	1.09	2	3.74	7
15.43 Stain finish to cedar deck.	14	m2	3.10	43	0.82	11	3.92	55
15.44 Stain finish to deck handrail and balustrade.	16	m	4.78	76	1.65	26	6.43	103
SUBTOTAL - PAINTING	15.99	/m2 GFA		1,856		558		2,414
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.19	84	5.98	120	10.17	203
16.20 Vanities and base cabinets.	7	m	35.80	251	392.00	2,744	427.80	2,995
16.21 Kitchen wall cabinets.	4	m	35.80	143	230.00	920	265.80	1,063
SUBTOTAL - FITTINGS	28.23	/m2 GFA		478		3,784		4,262

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.56	50	9.06	82	14.62	132
17.20 Medicine cabinets	2	No.	11.00	22	62.50	125	73.50	147
17.25 Mirrors	2	No.	11.00	22	78.00	156	89.00	178
17.30 25 mm dia. chrome shower curtain rods.	2	No.	5.60	11	6.60	13	12.20	24
17.40 Mail box and house numbers	1	set	5.60	6	31.85	32	37.45	37
17.50 18 mm dia. chrome coat rods.	6	No.	3.95	24	5.50	33	9.45	57
SUBTOTAL - SPECIALTIES	3.81	/m2 GFA		135		441		576
18. APPLIANCES								
18.10 Range hood	1	No.	18.00	18	105.00	105	123.00	123
SUBTOTAL - APPLIANCES	0.81	/m2 GFA		18		105		123

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,200.00	2,200	3,750.00	3,750	5,950.00	5,950
SUBTOTAL - PLUMBING	39.40	/m2 GFA		2,200		3,750		5,950
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	670.00	670	2,000.00	2,000	2,670.00	2,670
SUBTOTAL - HEATING	17.68	/m2 GFA		670		2,000		2,670

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,100.00	1,100	1,100.00	1,100
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,125.00	1,125	1,705.00	1,705	2,830.00	2,830
SUBTOTAL - ELECTRICAL	26.03	/m2 GFA		1,125		2,805		3,930
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - CALGARY	508.95	/m2 GFA		$22,089		$54,762		$76,851

DETAILED COST ESTIMATES FOR RED DEER

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.48	143	1.25	371	1.73	514
1.11	Excavate trench for garage grade beam.	4	m3	3.19	13	7.94	32	11.13	45
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.96	71	1.46	108	2.42	179
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.46	87	11.67	292	15.13	378
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.91	149	0.32	52	1.23	202
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	9.02	2,011	9.02	2,011
	SUBTOTAL - EXCAVATION	22.05	/m2 GFA		462		2,867		3,329
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	99.57	1,892	99.57	1,892

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	99.57	100	99.57	100
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.50	284	34.87	732	48.37	1,016
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.84	219	0.84	219
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.84	30	0.84	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.25	93	1.25	93
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	25.58	1,023	11.37	455	36.95	1,478
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.94	232	4.61	120	13.55	352
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.43	309	7.07	636	10.50	945
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.33	320	10.27	760	14.60	1,080

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	23.00	23	240.00	240	263.00	263
2.60	Parging to concrete walls.	10	m2	8.52	85	3.17	32	11.69	117
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle. mantle.	1	No.	550.00	550	1,490.00	1,490	2,040.00	2,040
	SUBTOTAL - CONCRETE	63.74	/m2 GFA		2,826		6,798		9,624
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.42	53	0.38	48	0.80	102
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.13	186	4.16	187	8.29	373
	SUBTOTAL - DAMPROOFING	3.14	/m2 GFA		239		235		474

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	6.82	1,016	13.78	2,053	20.60	3,069
4.20	Prefinished perforated aluminum soffit.	44	m2	5.58	246	9.67	425	15.25	671
4.30	Prefinished aluminum fascia.	70	m	0.90	63	2.30	161	3.20	224
4.40	Brick facing to front elevation.	20	m2	50.63	1,013	48.64	973	99.27	1,985
	SUBTOTAL - SIDING	39.40	/m2 GFA		2,337		3,613		5,950
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.78	500	4.20	756	6.98	1,256
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.74	174	4.06	406	5.76	576
	SUBTOTAL - ROOFING	12.16	/m2 GFA		674		1,162		1,836

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	411.39	3,456	411.39	3,456
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	561.89	1,349	561.89	1,349
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	6.60	2,323	6.60	2,323
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	4.99	843	4.99	843
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	25.33	3,825	0.00	0	25.33	3,825
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.42	24	0.91	51	1.33	74

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.05	14	14.10	28	21.15	42
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	429.00	429	621.00	621	1,050.00	1,050
	SUBTOTAL - CARPENTRY (ROUGH)		85.84	/m2 GFA		4,291		8,671		12,962
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	75.00	75	63.00	63	138.00	138
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	77.00	77	77.00	77	154.00	154
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	78.00	78	92.00	92	170.00	170
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.20	17	8.01	32	12.21	49

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	55.00	110	123.00	246	178.00	356
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.35	487	1.19	430	2.54	917
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	40.10	80	65.10	130
	SUBTOTAL - CARPENTRY (FINISH)	12.68	/m2 GFA		894		1,020		1,914
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	556.00	556	556.00	556
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	242.00	1,452	242.00	1,452
	- 900 x 1550 mm	2	No.	0.00	0	290.00	580	290.00	580
	SUBTOTAL - WINDOWS AND GLAZING	17.14	/m2 GFA		0		2,588		2,588

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.22	24	0.13	14	0.35	38
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.09	16	0.58	9	1.67	25
SUBTOTAL - SEALANTS	0.42	/m2 GFA		40		23		63
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	22.50	23	287.00	287	309.50	310
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	22.50	23	156.00	156	178.50	179
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	62.00	62	936.00	936	998.00	998
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	105.00	105	550.00	550	655.00	655

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	11.00	11	42.95	43	53.95	54
- 711 x 2080 mm	3	No.	11.00	33	42.95	129	53.95	162
- 762 x 2080 mm	6	No.	11.00	66	42.95	258	53.95	324
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	9.50	10	38.49	38	47.99	48
- 1220 x 2080 mm	3	No.	9.50	29	71.66	215	81.16	243
- 1320 x 2080 mm	1	No.	9.50	10	77.26	77	86.76	87
- 1524 x 2080 mm	1	No.	9.50	10	82.86	83	92.36	92
- 1830 x 2080 mm	1	No.	9.50	10	96.30	96	105.80	106
SUBTOTAL - DOORS	21.57	/m2 GFA		389		2,868		3,257
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	15.00	30	28.99	58	43.99	88
11.20 Security deadbolt.	1	No.	15.00	15	30.99	31	45.99	46
11.30 Latch sets.	7	sets	8.00	56	12.99	91	20.99	147
11.40 Bathroom privacy latch sets.	3	sets	8.00	24	14.99	45	22.99	69
11.60 Door stops.	11	No.	2.00	22	1.65	18	3.65	40
SUBTOTAL - HARDWARE	2.58	/m2 GFA		147		243		390

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.42	1,532	1.98	1,253	4.40	2,785
13.40 Finish to ceilings - textured.	138	m2	1.26	174	1.16	160	2.42	334
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.87	148	4.28	728	5.15	876
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.22	109	5.87	522	7.09	631
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.29	75	0.32	83	0.61	158
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.29	20	0.24	16	0.53	36
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.64	44	2.19	149	2.83	192
SUBTOTAL - WALLBOARD	33.20	/m2 GFA		2,101		2,912		5,013

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	5.63	118	11.94	251	17.57	369
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.60	382	24.98	2,648	28.58	3,029
SUBTOTAL - FLOORING	22.51	/m2 GFA		500		2,899		3,399
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.08	33	1.24	10	5.32	43
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	62.00	62	20.30	20	82.30	82
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.08	86	1.24	26	5.32	112
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.06	929	0.72	325	2.78	1,254
15.30 Two coats semigloss on internal doors and frames.	10	No.	20.30	203	6.34	63	26.64	266
15.35 Two coats semigloss on bi-fold doors.	7	No.	24.42	171	8.06	56	32.48	227

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.88	170	0.23	44	1.11	214
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.88	4	0.23	1	1.11	4
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.64	5	1.11	2	3.75	8
15.43 Stain finish to cedar deck.	14	m2	3.03	42	0.82	11	3.85	54
15.44 Stain finish to deck handrail and balustrade.	16	m	4.73	76	1.64	26	6.37	102
SUBTOTAL - PAINTING	15.67	/m2 GFA		1,780		586		2,366
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.78	76	5.78	116	9.56	191
16.20 Vanities and base cabinets.	7	m	33.00	231	399.00	2,793	432.00	3,024
16.21 Kitchen wall cabinets.	4	m	33.00	132	225.00	900	258.00	1,032
SUBTOTAL - FITTINGS	28.13	/m2 GFA		439		3,809		4,248

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.95	54	8.80	79	14.75	133
17.20 Medicine cabinets	2	No.	10.00	20	58.95	118	68.95	138
17.25 Mirrors	2	No.	10.00	20	75.00	150	85.00	170
17.30 25 mm dia. chrome shower curtain rods.	2	No.	5.50	11	6.49	13	11.99	24
17.40 Mail box and house numbers	1	set	5.50	6	29.98	30	35.48	35
17.50 18 mm dia. chrome coat rods.	6	No.	3.50	21	4.81	29	8.31	50
SUBTOTAL - SPECIALTIES	3.64	/m2 GFA		131		419		550
18. APPLIANCES								
18.10 Range hood	1	No.	15.50	16	95.00	95	110.50	111
SUBTOTAL - APPLIANCES	0.74	/m2 GFA		16		95		111

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,120.00	2,120	3,530.00	3,530	5,650.00	5,650
SUBTOTAL - PLUMBING	37.42	/m2 GFA		2,120		3,530		5,650
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	680.00	680	2,010.00	2,010	2,690.00	2,690
SUBTOTAL - HEATING	17.81	/m2 GFA		680		2,010		2,690

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,240.00	1,240	1,650.00	1,650	2,890.00	2,890
SUBTOTAL - ELECTRICAL	25.43	/m2 GFA		1,240		2,600		3,840
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - RED DEER	501.68	/m2 GFA		$21,306		$54,448		$75,754

DETAILED COST ESTIMATES FOR FORT McMURRAY

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.62	184	1.07	318	1.69	502
1.11	Excavate trench for garage grade beam.	4	m3	4.06	16	7.88	32	11.94	48
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.12	83	1.84	136	2.96	219
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.20	80	19.30	483	22.50	563
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.91	149	0.32	52	1.23	202
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	9.83	2,192	9.83	2,192
	SUBTOTAL - EXCAVATION	24.68	/m2 GFA		513		3,213		3,726
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	126.48	2,403	126.48	2,403

1988 ALBERTA HOUSE COST COMPARISON STUDY

SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	126.48	126	126.48	126
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.00	315	44.38	932	59.38	1,247
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.83	217	0.83	217
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.83	30	0.83	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.26	93	1.26	93
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	26.73	1,069	14.50	580	41.23	1,649
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.33	243	5.88	153	15.21	395
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.58	322	8.98	808	12.56	1,130
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.51	334	13.03	964	17.54	1,298

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	24.00	24	232.00	232	256.00	256
2.60	Parging to concrete walls.	10	m2	9.24	92	4.45	45	13.69	137
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	665.00	665	1,805.00	1,805	2,470.00	2,470
	SUBTOTAL - CONCRETE	75.84	/m2 GFA		3,064		8,388		11,452
3. DAMPROOFING									
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.39	50	0.39	50	0.78	99
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	7.13	321	4.40	198	11.53	519
	SUBTOTAL - DAMPROOFING	4.09	/m2 GFA		370		248		618

1988 ALBERTA HOUSE COST COMPARISON STUDY

SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	6.85	1,021	14.39	2,144	21.24	3,165
4.20	Prefinished perforated aluminum soffit.	44	m2	6.42	282	9.90	436	16.32	718
4.30	Prefinished aluminum fascia.	70	m	1.17	82	2.65	186	3.82	267
4.40	Brick facing to front elevation.	20	m2	51.49	1,030	47.37	947	98.86	1,977
	SUBTOTAL - SIDING	40.58	/m2 GFA		2,415		3,713		6,128
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.02	364	4.73	851	6.75	1,215
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.80	180	4.45	445	5.76	576
	SUBTOTAL - ROOFING	12.19	/m2 GFA		544		1,296		1,840

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	452.53	3,801	452.53	3,801
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	618.08	1,483	618.08	1,483
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.58	3,020	8.58	3,020
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.49	1,097	6.49	1,097
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	30.85	4,658	0.00	0	30.85	4,658
6.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.43	24	0.90	50	1.33	74

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	7.85	16	15.49	31	23.34	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	505.00	505	638.00	638	1,143.00	1,143
	SUBTOTAL - CARPENTRY (ROUGH)	101.48	/m2 GFA		5,203		10,121		15,324
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	90.00	90	73.00	73	163.00	163
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	93.00	93	92.00	92	185.00	185
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	94.00	94	107.00	107	201.00	201
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	4.20	17	8.56	34	12.76	51

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	63.00	126	142.00	284	205.00	410
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.50	542	1.34	484	2.84	1,025
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	30.00	60	45.75	92	75.75	152
	SUBTOTAL - CARPENTRY (FINISH)	14.48	/m2 GFA		1,021		1,165		2,186
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	586.00	586	586.00	586
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	255.00	1,530	255.00	1,530
	- 900 x 1550 mm	2	No.	0.00	0	305.00	610	305.00	610
	SUBTOTAL - WINDOWS AND GLAZING	18.05	/m2 GFA		0		2,726		2,726

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.23	25	0.14	15	0.37	40
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.16	17	0.62	9	1.78	27
SUBTOTAL - SEALANTS	0.44	/m2 GFA		42		25		67
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	315.00	315	343.00	343
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	170.00	170	198.00	198
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	70.00	70	1,025.00	1,025	1,095.00	1,095
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	115.00	115	592.00	592	707.00	707

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.50	14	48.99	49	62.49	62
- 711 x 2080 mm	3	No.	13.50	41	48.99	147	62.49	187
- 762 x 2080 mm	6	No.	13.50	81	48.99	294	62.49	375
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.75	11	41.99	42	52.74	53
- 1220 x 2080 mm	3	No.	10.75	32	72.94	219	83.69	251
- 1320 x 2080 mm	1	No.	10.75	11	78.64	79	89.39	89
- 1524 x 2080 mm	1	No.	10.75	11	84.34	84	95.09	95
- 1830 x 2080 mm	1	No.	10.75	11	98.02	98	108.77	109
SUBTOTAL - DOORS	23.61	/m2 GFA		451		3,114		3,565
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	18.00	36	31.88	64	49.88	100
11.20 Security deadbolt.	1	No.	18.00	18	33.60	34	51.60	52
11.30 Latch sets.	7	sets	9.00	63	14.20	99	23.20	162
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	16.20	49	25.20	76
11.60 Door stops.	11	No.	2.25	25	1.80	20	4.05	45
SUBTOTAL - HARDWARE	2.87	/m2 GFA		169		265		434

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.49	2,209	2.46	1,557	5.95	3,766
13.40 Finish to ceilings - textured.	138	m2	1.94	268	1.36	188	3.30	455
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.87	148	4.33	736	5.20	884
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.40	125	6.08	541	7.48	666
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.34	88	0.32	83	0.66	171
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.34	23	0.24	16	0.58	39
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.75	51	2.22	151	2.97	202
SUBTOTAL - WALLBOARD	40.95	/m2 GFA		2,912		3,272		6,184

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.30	132	11.94	251	18.24	383
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.75	398	25.56	2,709	29.31	3,107
SUBTOTAL - FLOORING	23.11	/m2 GFA		530		2,960		3,490
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.27	42	1.30	10	6.57	53
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	76.00	76	21.59	22	97.59	98
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.27	111	1.30	27	6.57	138
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.32	1,046	0.70	316	3.02	1,362
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.40	274	6.26	63	33.66	337
15.35 Two coats semigloss on bi-fold doors.	7	No.	34.58	242	8.10	57	42.68	299

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.95	183	0.25	48	1.20	232
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.95	4	0.25	1	1.20	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.91	6	1.29	3	4.20	8
15.43 Stain finish to cedar deck.	14	m2	3.31	46	0.95	13	4.26	60
15.44 Stain finish to deck handrail and balustrade.	16	m	4.69	75	1.72	28	6.41	103
SUBTOTAL - PAINTING	17.83	/m2 GFA		2,106		587		2,693
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.65	73	5.99	120	9.64	193
16.20 Vanities and base cabinets.	7	m	39.00	273	455.00	3,185	494.00	3,458
16.21 Kitchen wall cabinets.	4	m	39.00	156	256.00	1,024	295.00	1,180
SUBTOTAL - FITTINGS	31.99	/m2 GFA		502		4,329		4,831

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.20	56	9.10	82	15.30	138
17.20 Medicine cabinets	2	No.	12.35	25	63.45	127	75.80	152
17.25 Mirrors	2	No.	12.35	25	82.50	165	94.85	190
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.75	14	7.30	15	14.05	28
17.40 Mail box and house numbers	1	set	6.75	7	31.63	32	38.38	38
17.50 18 mm dia. chrome coat rods.	6	No.	4.50	27	5.82	35	10.32	62
SUBTOTAL - SPECIALTIES	4.02	/m2 GFA		152		455		607
18. APPLIANCES								
18.10 Range hood	1	No.	20.00	20	111.00	111	131.00	131
SUBTOTAL - APPLIANCES	0.87	/m2 GFA		20		111		131

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Wooda or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,440.00	2,440	3,820.00	3,820	6,260.00	6,260
SUBTOTAL - PLUMBING	41.46	/m2 GFA		2,440		3,820		6,260
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	810.00	810	2,435.00	2,435	3,245.00	3,245
SUBTOTAL - HEATING	21.49	/m2 GFA		810		2,435		3,245

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,290.00	1,290	1,840.00	1,840	3,130.00	3,130
SUBTOTAL - ELECTRICAL	27.35	/m2 GFA		1,290		2,840		4,130
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - FORT McMURRAY	563.82	/m2 GFA		$24,554		$60,583		$85,137

DETAILED COST ESTIMATES FOR GRANDE PRAIRIE

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.62	184	1.04	309	1.66	493
1.11	Excavate trench for garage grade beam.	4	m3	4.14	17	6.94	28	11.08	44
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.91	67	1.09	81	2.00	148
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.30	83	11.92	298	15.22	381
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.98	161	0.33	54	1.31	215
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.05	1,795	8.05	1,795
	SUBTOTAL - EXCAVATION	20.37	/m2 GFA		511		2,565		3,076
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	127.10	2,415	127.10	2,415

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	127.10	127	127.10	127
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.50	326	37.54	788	53.04	1,114
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.82	214	0.82	214
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.82	30	0.82	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.32	98	1.32	98
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	24.16	966	12.20	488	36.36	1,454
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.50	221	4.90	127	13.40	348
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.49	314	9.22	830	12.71	1,144
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.42	327	13.20	977	17.62	1,304

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	24.00	24	230.00	230	254.00	254
2.60	Parging to concrete walls.	10	m2	9.48	95	4.49	45	13.97	140
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	625.00	625	1,725.00	1,725	2,350.00	2,350
	SUBTOTAL - CONCRETE	72.79	/m2 GFA		2,898		8,093		10,991
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.38	48	0.38	48	0.76	97
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	6.30	284	4.48	202	10.78	485
	SUBTOTAL - DAMPROOFING	3.85	/m2 GFA		332		250		582

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.	SIDING								
4.10	100 mm vinyl siding including building paper.	149	m2	6.57	979	14.33	2,135	20.90	3,114
4.20	Prefinished perforated aluminum soffit.	44	m2	5.90	260	10.40	458	16.30	717
4.30	Prefinished aluminum fascia.	70	m	1.11	78	2.70	189	3.81	267
4.40	Brick facing to front elevation.	20	m2	48.27	965	43.76	875	92.03	1,841
	SUBTOTAL - SIDING	39.33	/m2 GFA		2,282		3,657		5,939
5.	ROOFING								
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.13	383	4.88	878	7.01	1,262
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.78	178	4.50	450	6.28	628
	SUBTOTAL - ROOFING	12.51	/m2 GFA		561		1,328		1,889

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	434.02	3,646	434.02	3,646
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	591.34	1,419	591.34	1,419
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.55	2,658	7.55	2,658
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	4.99	843	4.99	843
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.64	4,325	0.00	0	28.64	4,325
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.45	25	0.91	51	1.36	76

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	8.32	17	15.00	30	23.32	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	480.00	480	614.00	614	1,094.00	1,094
	SUBTOTAL - CARPENTRY (ROUGH)	93.42	/m2 GFA		4,846		9,261		14,107
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	83.00	83	62.00	62	145.00	145
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	85.00	85	78.00	78	163.00	163
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	86.00	86	90.00	90	176.00	176
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	4.40	18	8.15	33	12.55	50

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	57.00	114	124.00	248	181.00	362
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.50	542	1.21	437	2.71	978
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	27.00	54	38.80	78	65.80	132
	SUBTOTAL - CARPENTRY (FINISH)	13.28	/m2 GFA		981		1,025		2,006
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	586.00	586	586.00	586
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	250.00	1,500	250.00	1,500
	- 900 x 1550 mm	2	No.	0.00	0	305.00	610	305.00	610
	SUBTOTAL - WINDOWS AND GLAZING	17.85	/m2 GFA		0		2,696		2,696

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.24	26	0.14	15	0.38	41
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.16	17	0.61	9	1.77	27
SUBTOTAL - SEALANTS	0.45	/m2 GFA		44		24		68
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	325.00	325	351.00	351
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	175.00	175	201.00	201
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	65.00	65	1,030.00	1,030	1,095.00	1,095
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	110.00	110	600.00	600	710.00	710

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.50	14	46.95	47	60.45	60
- 711 x 2080 mm	3	No.	13.50	41	46.95	141	60.45	181
- 762 x 2080 mm	6	No.	13.50	81	46.95	282	60.45	363
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.50	12	44.39	44	55.89	56
- 1220 x 2080 mm	3	No.	11.50	35	77.00	231	88.50	266
- 1320 x 2080 mm	1	No.	11.50	12	82.78	83	94.28	94
- 1524 x 2080 mm	1	No.	11.50	12	88.78	89	100.28	100
- 1830 x 2080 mm	1	No.	11.50	12	103.18	103	114.68	115
SUBTOTAL - DOORS	23.79	/m2 GFA		443		3,150		3,593
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.50	35	28.99	58	46.49	93
11.20 Security deadbolt.	1	No.	17.50	18	30.99	31	48.49	48
11.30 Latch sets.	7	sets	8.75	61	12.99	91	21.74	152
11.40 Bathroom privacy latch sets.	3	sets	8.75	26	14.99	45	23.74	71
11.60 Door stops.	11	No.	2.10	23	1.65	18	3.75	41
SUBTOTAL - HARDWARE	2.69	/m2 GFA		163		243		406

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.88	1,823	2.38	1,507	5.26	3,330
13.40 Finish to ceilings - textured.	138	m2	1.40	193	1.28	177	2.68	370
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.89	151	4.20	714	5.09	865
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.49	133	7.51	668	9.00	801
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.34	88	0.33	85	0.67	174
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.34	23	0.25	17	0.59	40
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.73	50	2.20	150	2.93	199
SUBTOTAL - WALLBOARD	38.27	/m2 GFA		2,461		3,318		5,779

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.47	136	12.06	253	18.53	389
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.69	391	27.42	2,907	31.11	3,298
SUBTOTAL - FLOORING	24.42	/m2 GFA		527		3,160		3,687
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.28	42	1.27	10	6.55	52
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	70.00	70	21.99	22	91.99	92
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.28	111	1.27	27	6.55	138
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.25	1,015	0.70	316	2.95	1,330
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.00	270	6.14	61	33.14	331
15.35 Two coats semigloss on bi-fold doors.	7	No.	34.75	243	7.97	56	42.72	299

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.96	185	0.25	48	1.21	234
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.96	4	0.25	1	1.21	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	3.08	6	1.16	2	4.24	8
15.43 Stain finish to cedar deck.	14	m2	3.37	47	0.81	11	4.18	59
15.44 Stain finish to deck handrail and balustrade.	16	m	5.30	85	1.65	26	6.95	111
SUBTOTAL - PAINTING	17.61	/m2 GFA		2,078		581		2,659
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.80	76	5.73	115	9.53	191
16.20 Vanities and base cabinets.	7	m	38.00	266	410.00	2,870	448.00	3,136
16.21 Kitchen wall cabinets.	4	m	38.00	152	232.00	928	270.00	1,080
SUBTOTAL - FITTINGS	29.19	/m2 GFA		494		3,913		4,407

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.15	55	9.40	85	15.55	140
17.20 Medicine cabinets	2	No.	12.00	24	62.80	126	74.80	150
17.25 Mirrors	2	No.	12.00	24	80.00	160	92.00	184
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.50	13	6.92	14	13.42	27
17.40 Mail box and house numbers	1	set	6.50	7	31.95	32	38.45	38
17.50 18 mm dia. chrome coat rods.	6	No.	4.05	24	5.87	35	9.92	60
SUBTOTAL - SPECIALTIES	3.96	/m2 GFA		147		451		598
18. APPLIANCES								
18.10 Range hood	1	No.	20.00	20	112.00	112	132.00	132
SUBTOTAL - APPLIANCES	0.87	/m2 GFA		20		112		132

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,275.00	2,275	3,650.00	3,650	5,925.00	5,925
SUBTOTAL - PLUMBING	39.24	/m2 GFA		2,275		3,650		5,925
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	760.00	760	2,300.00	2,300	3,060.00	3,060
SUBTOTAL - HEATING	20.26	/m2 GFA		760		2,300		3,060

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,150.00	1,150	1,800.00	1,800	2,950.00	2,950
SUBTOTAL - ELECTRICAL	26.16	/m2 GFA		1,150		2,800		3,950
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - GRANDE PRAIRIE	536.75	/m2 GFA		$22,973		$58,077		$81,050

DETAILED COST ESTIMATES FOR HINTON

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.47	140	0.99	294	1.46	434
1.11	Excavate trench for garage grade beam.	4	m3	3.14	13	7.33	29	10.47	42
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.92	68	1.48	110	2.40	178
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.40	85	6.84	171	10.24	256
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.89	146	0.32	52	1.21	198
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.92	1,766	7.92	1,766
	SUBTOTAL - EXCAVATION	19.03	/m2 GFA		451		2,423		2,874
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	123.49	2,346	123.49	2,346

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	123.49	123	123.49	123
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.50	326	36.32	763	51.82	1,088
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.80	209	0.80	209
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.80	29	0.80	29
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.20	89	1.20	89
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	28.81	1,152	13.42	537	42.23	1,689
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.68	278	5.46	142	16.14	420
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.85	347	8.77	789	12.62	1,136
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.84	358	12.40	918	17.24	1,276

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	22.00	22	260.00	260	282.00	282
2.60	Parging to concrete walls.	10	m2	9.16	92	3.76	38	12.92	129
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	620.00	620	1,530.00	1,530	2,150.00	2,150
	SUBTOTAL - CONCRETE	72.62	/m2 GFA		3,194		7,772		10,966
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.30	38	0.30	38	0.60	76
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.53	204	4.07	183	8.60	387
	SUBTOTAL - DAMPROOFING	3.07	/m2 GFA		242		221		463

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	7.20	1,073	11.07	1,649	18.27	2,722
4.20	Prefinished perforated aluminum soffit.	44	m2	3.93	173	10.19	448	14.12	621
4.30	Prefinished aluminum fascia.	70	m	0.83	58	2.30	161	3.13	219
4.40	Brick facing to front elevation.	20	m2	50.35	1,007	45.53	911	95.88	1,918
	SUBTOTAL - SIDING	36.29	/m2 GFA		2,311		3,169		5,480
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	1.88	338	4.57	823	6.45	1,161
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.77	177	3.32	332	5.76	576
	SUBTOTAL - ROOFING	11.06	/m2 GFA		515		1,155		1,670

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	423.73	3,559	423.73	3,559
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	578.75	1,389	578.75	1,389
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.92	2,788	7.92	2,788
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.99	1,012	5.99	1,012
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	27.54	4,159	0.00	0	27.54	4,159
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.38	21	0.86	48	1.24	69

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	8.10	16	14.50	29	22.60	45
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	491.00	491	645.00	645	1,136.00	1,136
	SUBTOTAL - CARPENTRY (ROUGH)	93.76	/m2 GFA		4,687		9,471		14,158
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	77.00	77	66.00	66	143.00	143
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	79.00	79	83.00	83	162.00	162
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	80.00	80	97.00	97	177.00	177
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	4.33	17	8.56	34	12.89	52

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	57.00	114	130.00	260	187.00	374
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.20	433	1.25	451	2.45	884
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	40.50	81	65.50	131
	SUBTOTAL - CARPENTRY (FINISH)	12.74	/m2 GFA		851		1,072		1,923
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	533.00	533	533.00	533
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	232.00	1,392	232.00	1,392
	- 900 x 1550 mm	2	No.	0.00	0	278.00	556	278.00	556
	SUBTOTAL - WINDOWS AND GLAZING	16.43	/m2 GFA		0		2,481		2,481

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.20	22	0.12	13	0.32	35
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.10	17	0.59	9	1.69	25
SUBTOTAL - SEALANTS	0.40	/m2 GFA		38		22		60
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	300.00	300	325.00	325
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	162.00	162	187.00	187
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	66.00	66	954.00	954	1,020.00	1,020
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	110.00	110	560.00	560	670.00	670

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.25	12	46.50	47	58.75	59
- 711 x 2080 mm	3	No.	12.25	37	46.50	140	58.75	176
- 762 x 2080 mm	6	No.	12.25	74	46.50	279	58.75	353
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.00	10	39.95	40	49.95	50
- 1220 x 2080 mm	3	No.	10.00	30	69.10	207	79.10	237
- 1320 x 2090 mm	1	No.	10.00	10	74.50	75	84.50	85
- 1524 x 2080 mm	1	No.	10.00	10	79.90	80	89.90	90
- 1830 x 2080 mm	1	No.	10.00	10	92.86	93	102.86	103
SUBTOTAL - DOORS	22.22	/m2 GFA		419		2,936		3,355
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.00	32	28.99	58	44.99	90
11.20 Security deadbolt.	1	No.	16.00	16	30.99	31	46.99	47
11.30 Latch sets.	7	sets	8.00	56	12.99	91	20.99	147
11.40 Bathroom privacy latch sets.	3	sets	8.00	24	14.99	45	22.99	69
11.60 Door stops.	11	No.	2.00	22	1.65	18	3.65	40
SUBTOTAL - HARDWARE	2.60	/m2 GFA		150		243		393

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.00	1,899	2.48	1,570	5.48	3,469
13.40 Finish to ceilings - textured.	138	m2	1.24	171	1.26	174	2.50	345
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.83	141	4.20	714	5.03	855
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.15	102	5.74	511	6.89	613
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.27	70	0.32	83	0.59	153
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.27	18	0.22	15	0.49	33
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.64	44	2.15	146	2.79	190
SUBTOTAL - WALLBOARD	37.47	/m2 GFA		2,445		3,213		5,658

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	5.73	120	11.94	251	17.67	371
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.40	360	24.62	2,610	28.02	2,970
SUBTOTAL - FLOORING	22.13	/m2 GFA		481		2,860		3,341
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.60	37	1.20	10	5.80	46
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	67.00	67	20.69	21	87.69	88
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.60	97	1.20	25	5.80	122
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.20	992	0.70	316	2.90	1,308
15.30 Two coats semigloss on internal doors and frames.	10	No.	25.50	255	6.01	60	31.51	315
15.35 Two coats semigloss on bi-fold doors.	7	No.	28.10	197	7.80	55	35.90	251

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.89	172	0.23	44	1.12	216
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.89	4	0.23	1	1.12	4
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.74	5	1.07	2	3.81	8
15.43 Stain finish to cedar deck.	14	m2	3.13	44	0.80	11	3.93	55
15.44 Stain finish to deck handrail and balustrade.	16	m	4.94	79	1.59	25	6.53	104
SUBTOTAL - PAINTING	16.68	/m2 GFA		1,948		570		2,518
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.65	73	5.88	118	9.53	191
16.20 Vanities and base cabinets.	7	m	34.50	242	405.00	2,835	439.50	3,077
16.21 Kitchen wall cabinets.	4	m	34.50	138	229.00	916	263.50	1,054
SUBTOTAL - FITTINGS	28.62	/m2 GFA		453		3,869		4,322

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.50	50	8.80	79	14.30	129
17.20 Medicine cabinets	2	No.	11.00	22	58.95	118	69.95	140
17.25 Mirrors	2	No.	11.00	22	75.00	150	86.00	172
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.50	13	6.49	13	12.99	26
17.40 Mail box and house numbers	1	set	6.50	7	29.98	30	36.48	36
17.50 18 mm dia. chrome coat rods.	6	No.	3.50	21	4.81	29	8.31	50
SUBTOTAL - SPECIALTIES	3.66	/m2 GFA		134		419		553
18. APPLIANCES								
18.10 Range hood	1	No.	17.50	18	99.00	99	116.50	117
SUBTOTAL - APPLIANCES	0.77	/m2 GFA		18		99		117

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,270.00	2,270	3,520.00	3,520	5,790.00	5,790
SUBTOTAL - PLUMBING	38.34	/m2 GFA		2,270		3,520		5,790
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	680.00	680	2,280.00	2,280	2,960.00	2,960
SUBTOTAL - HEATING	19.60	/m2 GFA		680		2,280		2,960

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,300.00	1,300	1,710.00	1,710	3,010.00	3,010
SUBTOTAL - ELECTRICAL	26.23	/m2 GFA		1,300		2,660		3,960
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - HINTON	520.15	/m2 GFA		$22,587		$55,955		$78,542

DETAILED COST ESTIMATES FOR LETHBRIDGE

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.43	128	1.43	425	1.86	552
1.11	Excavate trench for garage grade beam.	4	m3	2.92	12	9.30	37	12.22	49
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.83	61	1.65	122	2.48	184
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.20	80	11.97	299	15.17	379
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.89	146	0.30	49	1.19	195
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.60	1,918	8.60	1,918
	SUBTOTAL - EXCAVATION	21.70	/m2 GFA		427		2,850		3,277
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	89.70	1,704	89.70	1,704

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	89.70	90	89.70	90
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.20	277	31.40	659	44.60	937
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.78	204	0.78	204
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.78	28	0.78	28
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.18	87	1.18	87
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	24.90	996	12.93	517	37.83	1,513
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.72	227	5.28	137	14.00	364
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.53	318	6.38	574	9.91	892
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.43	328	9.24	684	13.67	1,012

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	23.00	23	220.00	220	243.00	243
2.60	Parging to concrete walls.	10	m2	9.30	93	2.89	29	12.19	122
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	790.00	790	1,870.00	1,870	2,660.00	2,660
	SUBTOTAL - CONCRETE	65.26	/m2 GFA		3,051		6,804		9,855
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.34	43	0.30	38	0.64	81
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.60	207	4.04	182	8.64	389
	SUBTOTAL - DAMPROOFING	3.11	/m2 GFA		250		220		470

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	4.89	729	13.06	1,946	17.95	2,675
4.20	Prefinished perforated aluminum soffit.	44	m2	4.44	195	9.79	431	14.23	626
4.30	Prefinished aluminum fascia.	70	m	1.40	98	2.78	195	4.18	293
4.40	Brick facing to front elevation.	20	m2	45.73	915	40.61	812	86.34	1,727
	SUBTOTAL - SIDING	35.24	/m2 GFA		1,937		3,384		5,321
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.40	432	4.36	785	6.76	1,217
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.71	171	3.56	356	5.76	576
	SUBTOTAL - ROOFING	11.55	/m2 GFA		603		1,141		1,744

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	423.70	3,559	423.70	3,559
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	578.72	1,389	578.72	1,389
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.33	2,580	7.33	2,580
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.54	936	5.54	936
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	26.82	4,050	0.00	0	26.82	4,050
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.40	22	0.89	50	1.29	72

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	6.82	14	15.00	30	21.82	44
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	445.00	445	650.00	650	1,095.00	1,095
	SUBTOTAL - CARPENTRY (ROUGH)	90.89	/m2 GFA		4,531		9,194		13,725
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	77.00	77	69.00	69	146.00	146
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	80.00	80	86.00	86	166.00	166
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	82.00	82	100.00	100	182.00	182
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	4.30	17	7.86	31	12.16	49

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	56.00	112	132.00	264	188.00	376
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.22	440	1.25	451	2.47	892
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	41.60	83	66.60	133
	SUBTOTAL - CARPENTRY (FINISH)	12.87	/m2 GFA		859		1,085		1,944
8. WINDOWS AND GLAZING									
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	530.00	530	530.00	530
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	232.00	1,392	232.00	1,392
	- 900 x 1550 mm	2	No.	0.00	0	276.00	552	276.00	552
	SUBTOTAL - WINDOWS AND GLAZING	16.38	/m2 GFA		0		2,474		2,474

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.20	22	0.11	12	0.31	34
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.10	17	0.58	9	1.68	25
SUBTOTAL - SEALANTS	0.39	/m2 GFA		38		21		59
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	287.00	287	312.00	312
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	156.00	156	181.00	181
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	62.00	62	930.00	930	992.00	992
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	100.00	100	560.00	560	660.00	660

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	11.50	12	39.99	40	51.49	51
- 711 x 2080 mm	3	No.	11.50	35	39.99	120	51.49	154
- 762 x 2080 mm	6	No.	11.50	69	39.99	240	51.49	309
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	9.50	10	39.95	40	49.45	49
- 1220 x 2080 mm	3	No.	9.50	29	69.10	207	78.60	236
- 1320 x 2080 mm	1	No.	9.50	10	74.50	75	84.00	84
- 1524 x 2080 mm	1	No.	9.50	10	79.90	80	89.40	89
- 1830 x 2080 mm	1	No.	9.50	10	92.86	93	102.36	102
SUBTOTAL - DOORS	21.33	/m2 GFA		394		2,827		3,221
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.00	32	30.70	61	46.70	93
11.20 Security deadbolt.	1	No.	16.00	16	33.15	33	49.15	49
11.30 Latch sets.	7	sets	9.00	63	13.78	96	22.78	159
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	15.90	48	24.90	75
11.60 Door stops.	11	No.	2.00	22	1.73	19	3.73	41
SUBTOTAL - HARDWARE	2.77	/m2 GFA		160		258		418

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.50	1,583	2.08	1,317	4.58	2,899
13.40 Finish to ceilings - textured.	138	m2	1.28	177	1.17	161	2.45	338
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.97	165	4.49	763	5.46	928
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.26	112	5.86	522	7.12	634
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.33	85	0.30	78	0.63	163
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.33	22	0.24	16	0.57	39
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.61	41	2.21	150	2.82	192
SUBTOTAL - WALLBOARD	34.39	/m2 GFA		2,186		3,007		5,193

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	5.90	124	11.58	243	17.48	367
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.31	351	24.12	2,557	27.43	2,908
SUBTOTAL - FLOORING	21.69	/m2 GFA		475		2,800		3,275
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.28	34	1.21	10	5.49	44
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	66.00	66	20.58	21	86.58	87
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.28	90	1.21	25	5.49	115
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.30	1,037	0.70	316	3.00	1,353
15.30 Two coats semigloss on internal doors and frames.	10	No.	25.00	250	6.02	60	31.02	310
15.35 Two coats semigloss on bi-fold doors.	7	No.	30.65	215	7.80	55	38.45	269

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.92	178	0.22	42	1.14	220
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.92	4	0.22	1	1.14	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.61	5	1.14	2	3.75	8
15.43 Stain finish to cedar deck.	14	m2	3.09	43	0.89	12	3.98	56
15.44 Stain finish to deck handrail and balustrade.	16	m	4.72	76	1.67	27	6.39	102
SUBTOTAL - PAINTING	17.01	/m2 GFA		1,997		571		2,568
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.87	77	6.21	124	10.08	202
16.20 Vanities and base cabinets.	7	m	32.93	231	429.00	3,003	461.93	3,234
16.21 Kitchen wall cabinets.	4	m	32.93	132	242.00	968	274.93	1,100
SUBTOTAL - FITTINGS	30.03	/m2 GFA		440		4,095		4,535

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.46	58	8.80	79	15.26	137
17.20 Medicine cabinets	2	No.	12.00	24	63.54	127	75.54	151
17.25 Mirrors	2	No.	12.00	24	80.35	161	92.35	185
17.30 25 mm dia. chrome shower curtain rods.	2	No.	4.72	9	6.60	13	11.32	23
17.40 Mail box and house numbers	1	set	6.00	6	25.86	26	31.86	32
17.50 18 mm dia. chrome coat rods.	6	No.	3.95	24	5.50	33	9.45	57
SUBTOTAL - SPECIALTIES	3.87	/m2 GFA		145		439		584
18. APPLIANCES								
18.10 Range hood	1	No.	18.00	18	110.00	110	128.00	128
SUBTOTAL - APPLIANCES	0.85	/m2 GFA		18		110		128

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	1,900.00	1,900	3,460.00	3,460	5,360.00	5,360
SUBTOTAL - PLUMBING	35.50	/m2 GFA		1,900		3,460		5,360
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	600.00	600	1,860.00	1,860	2,460.00	2,460
SUBTOTAL - HEATING	16.29	/m2 GFA		600		1,860		2,460

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,280.00	1,280	1,690.00	1,690	2,970.00	2,970
SUBTOTAL - ELECTRICAL	25.96	/m2 GFA		1,280		2,640		3,920
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - LETHBRIDGE	503.52	/m2 GFA		$21,291		$54,740		$76,031

DETAILED COST ESTIMATES FOR MEDICINE HAT

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.57	169	0.97	288	1.54	457
1.11	Excavate trench for garage grade beam.	4	m3	3.80	15	7.18	29	10.98	44
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.70	52	1.01	75	1.71	127
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.23	81	9.42	236	12.65	316
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.89	146	0.29	48	1.18	194
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.33	1,858	8.33	1,858
	SUBTOTAL - EXCAVATION	19.83	/m2 GFA		463		2,532		2,995
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	104.95	1,994	104.95	1,994

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	104.95	105	104.95	105
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	14.50	305	36.42	765	50.92	1,069
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.78	204	0.78	204
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.78	28	0.78	28
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.18	87	1.18	87
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	28.68	1,147	12.75	510	41.43	1,657
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.02	261	5.19	135	15.21	395
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.83	345	7.45	671	11.28	1,015
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.80	355	10.76	796	15.56	1,151

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	24.00	24	232.00	232	256.00	256
2.60	Parging to concrete walls.	10	m2	9.62	96	3.14	31	12.76	128
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	655.00	655	1,795.00	1,795	2,450.00	2,450
	SUBTOTAL - CONCRETE	69.80	/m2 GFA		3,187		7,353		10,540
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.36	46	0.31	39	0.67	85
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.91	176	4.32	194	8.23	370
	SUBTOTAL - DAMPROOFING	3.02	/m2 GFA		222		234		456

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.	SIDING								
4.10	100 mm vinyl siding including building paper.	149	m2	4.74	706	12.28	1,830	17.02	2,536
4.20	Prefinished perforated aluminum soffit.	44	m2	4.26	187	13.72	604	17.98	791
4.30	Prefinished aluminum fascia.	70	m	1.42	99	2.72	190	4.14	290
4.40	Brick facing to front elevation.	20	m2	44.83	897	39.43	789	84.26	1,685
	SUBTOTAL - SIDING	35.11	/m2 GFA		1,890		3,412		5,302
5.	ROOFING								
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.61	470	4.42	796	7.03	1,265
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.64	164	3.60	360	5.76	576
	SUBTOTAL - ROOFING	11.85	/m2 GFA		634		1,156		1,790

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)								
6.10 Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	411.39	3,456	411.39	3,456
6.20 Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	561.89	1,349	561.89	1,349
6.30 Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.13	2,510	7.13	2,510
6.35 Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.39	911	5.39	911
6.40 Labour Only - complete house framing including trusses and window installation.	151	m2	21.74	3,283	0.00	0	21.74	3,283
6.50 Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.40	22	0.93	52	1.33	74

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	7.05	14	14.00	28	21.05	42
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	449.00	449	615.00	615	1,064.00	1,064
	SUBTOTAL - CARPENTRY (ROUGH)	84.03	/m2 GFA		3,768		8,920		12,688
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	79.00	79	64.00	64	143.00	143
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	81.00	81	80.00	80	161.00	161
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	82.00	82	94.00	94	176.00	176
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	4.25	17	7.98	32	12.23	49

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	58.00	116	130.00	260	188.00	376
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.20	433	1.22	440	2.42	874
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	26.00	52	40.50	81	66.50	133
	SUBTOTAL - CARPENTRY (FINISH)	12.66	/m2 GFA		860		1,051		1,911
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	540.00	540	540.00	540
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	237.00	1,422	237.00	1,422
	- 900 x 1550 mm	2	No.	0.00	0	282.00	564	282.00	564
	SUBTOTAL - WINDOWS AND GLAZING	16.73	/m2 GFA		0		2,526		2,526

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.22	24	0.11	12	0.33	36
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.13	17	0.59	9	1.72	26
SUBTOTAL - SEALANTS	0.41	/m2 GFA		41		21		62
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	24.50	25	280.00	280	304.50	305
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	24.50	25	155.00	155	179.50	180
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	64.00	64	960.00	960	1,024.00	1,024
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	100.00	100	530.00	530	630.00	630

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.50	13	39.99	40	52.49	52
- 711 x 2080 mm	3	No.	12.50	38	39.99	120	52.49	157
- 762 x 2080 mm	6	No.	12.50	75	39.99	240	52.49	315
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.50	11	36.99	37	47.49	47
- 1220 x 2080 mm	3	No.	10.50	32	63.98	192	74.48	223
- 1320 x 2080 mm	1	No.	10.50	11	68.98	69	79.48	79
- 1524 x 2080 mm	1	No.	10.50	11	73.98	74	84.48	84
- 1830 x 2080 mm	1	No.	10.50	11	85.98	86	96.48	96
SUBTOTAL - DOORS	21.16	/m2 GFA		412		2,783		3,195
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.50	33	28.99	58	45.49	91
11.20 Security deadbolt.	1	No.	16.50	17	31.65	32	48.15	48
11.30 Latch sets.	7	sets	9.00	63	12.99	91	21.99	154
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	14.99	45	23.99	72
11.60 Door stops.	11	No.	2.25	25	1.65	18	3.90	43
SUBTOTAL - HARDWARE	2.70	/m2 GFA		164		244		408

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.53	1,601	2.04	1,291	4.57	2,893
13.40 Finish to ceilings - textured.	138	m2	1.32	182	1.19	164	2.51	346
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.99	168	4.41	750	5.40	918
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.30	116	5.80	516	7.10	632
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.34	88	0.29	75	0.63	163
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.28	19	0.23	16	0.51	35
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.67	46	2.74	186	3.41	232
SUBTOTAL - WALLBOARD	34.56	/m2 GFA		2,220		2,999		5,219

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.04	127	11.97	251	18.01	378
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.92	416	25.20	2,671	29.12	3,087
SUBTOTAL - FLOORING	22.95	/m2 GFA		542		2,923		3,465
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.56	36	1.30	10	5.86	47
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	67.00	67	22.05	22	89.05	89
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.56	96	1.30	27	5.86	123
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.24	1,010	0.70	316	2.94	1,326
15.30 Two coats semigloss on internal doors and frames.	10	No.	25.00	250	6.49	65	31.49	315
15.35 Two coats semigloss on bi-fold doors.	7	No.	30.58	214	7.98	56	38.56	270

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.93	179	0.24	46	1.17	226
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.93	4	0.24	1	1.17	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.86	6	1.18	2	4.04	8
15.43 Stain finish to cedar deck.	14	m2	3.32	46	0.91	13	4.23	59
15.44 Stain finish to deck handrail and balustrade.	16	m	4.91	79	1.79	29	6.70	107
SUBTOTAL - PAINTING	17.05	/m2 GFA		1,988		587		2,575
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.21	84	5.99	120	10.20	204
16.20 Vanities and base cabinets.	7	m	35.80	251	414.00	2,898	449.80	3,149
16.21 Kitchen wall cabinets.	4	m	35.80	143	233.00	932	268.80	1,075
SUBTOTAL - FITTINGS	29.32	/m2 GFA		478		3,950		4,428

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.46	58	8.80	79	15.26	137
17.20 Medicine cabinets	2	No.	12.00	24	63.54	127	75.54	151
17.25 Mirrors	2	No.	12.00	24	80.35	161	92.35	185
17.30 25 mm dia. chrome shower curtain rods.	2	No.	4.72	9	6.60	13	11.32	23
17.40 Mail box and house numbers	1	set	6.00	6	25.86	26	31.86	32
17.50 18 mm dia. chrome coat rods.	6	No.	3.95	24	5.50	33	9.45	57
SUBTOTAL - SPECIALTIES	3.87	/m2 GFA		145		439		584
18. APPLIANCES								
18.10 Range hood	1	No.	18.00	18	110.00	110	128.00	128
SUBTOTAL - APPLIANCES	0.85	/m2 GFA		18		110		128

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,050.00	2,050	3,425.00	3,425	5,475.00	5,475
SUBTOTAL - PLUMBING	36.26	/m2 GFA		2,050		3,425		5,475
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	740.00	740	2,100.00	2,100	2,840.00	2,840
SUBTOTAL - HEATING	18.81	/m2 GFA		740		2,100		2,840

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,365.00	1,365	1,830.00	1,830	3,195.00	3,195
SUBTOTAL - ELECTRICAL	27.45	/m2 GFA		1,365		2,780		4,145
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - MEDICINE HAT	504.85	/m2 GFA		$21,187		$55,045		$76,232

DETAILED COST ESTIMATES FOR LLOYDMINSTER

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.43	128	1.58	469	2.01	597
1.11	Excavate trench for garage grade beam.	4	m3	3.08	12	9.81	39	12.89	52
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.79	58	1.70	126	2.49	184
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.15	79	10.60	265	13.75	344
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.84	138	0.32	52	1.16	190
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	9.32	2,078	9.32	2,078
	SUBTOTAL - EXCAVATION	22.81	/m2 GFA		415		3,030		3,445
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	113.02	2,147	113.02	2,147

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	113.02	113	113.02	113
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.25	278	39.58	831	52.83	1,109
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.80	209	0.80	209
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.80	29	0.80	29
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.20	89	1.20	89
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	24.90	996	11.82	473	36.72	1,469
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.69	226	4.79	125	13.48	350
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.34	301	6.76	608	10.10	909
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.20	311	9.81	726	14.01	1,037

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	22.00	22	225.00	225	247.00	247
2.60	Parging to concrete walls.	10	m2	8.90	89	3.68	37	12.58	126
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	572.00	572	1,790.00	1,790	2,362.00	2,362
	SUBTOTAL - CONCRETE	67.52	/m2 GFA		2,795		7,401		10,196
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.29	37	0.29	37	0.58	74
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.60	162	4.64	209	8.24	371
	SUBTOTAL - DAMPROOFING	2.95	/m2 GFA		199		246		445

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.	SIDING								
4.10	100 mm vinyl siding including building paper.	149	m2	5.88	876	13.11	1,953	18.99	2,830
4.20	Prefinished perforated aluminum soffit.	44	m2	5.38	237	11.49	506	16.87	742
4.30	Prefinished aluminum fascia.	70	m	0.98	69	2.59	181	3.57	250
4.40	Brick facing to front elevation.	20	m2	46.42	928	42.21	844	88.63	1,773
	SUBTOTAL - SIDING	37.05	/m2 GFA		2,110		3,484		5,594
5.	ROOFING								
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	1.72	310	4.23	761	5.95	1,071
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.57	157	3.46	346	5.76	576
	SUBTOTAL - ROOFING	10.42	/m2 GFA		467		1,107		1,574

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	411.39	3,456	411.39	3,456
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	561.89	1,349	561.89	1,349
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.33	2,580	7.33	2,580
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	4.99	843	4.99	843
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	23.54	3,555	0.00	0	23.54	3,555
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.39	22	0.93	52	1.32	74

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	7.00	14	14.20	28	21.20	42
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.	1	No.	419.00	419	632.00	632	1,051.00	1,051
	SUBTOTAL - CARPENTRY (ROUGH)	85.75	/m2 GFA		4,009		8,940		12,949
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 5 m								
	6.4 mm fir plywood in risers 6 m	1	No.	75.00	75	65.00	65	140.00	140
7.11	Stair - 8 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 7 m								
	6.4 mm fir plywood in risers 8 m	1	No.	77.00	77	81.00	81	158.00	158
7.15	Stair - 9 risers								
	38 x 235 mm stringers 4 m								
	38 x 235 mm treads 8 m								
	6.4 mm fir plywood in risers 9 m	1	No.	78.00	78	95.00	95	173.00	173
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	3.84	15	8.70	35	12.54	50

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	55.00	110	130.00	260	185.00	370
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.30	469	1.28	462	2.58	931
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	41.63	83	66.63	133
	SUBTOTAL - CARPENTRY (FINISH)	12.95	/m2 GFA		875		1,081		1,956
8. WINDOWS AND GLAZING									
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	546.00	546	546.00	546
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	238.00	1,428	238.00	1,428
	- 900 x 1550 mm	2	No.	0.00	0	285.00	570	285.00	570
	SUBTOTAL - WINDOWS AND GLAZING	16.85	/m2 GFA		0		2,544		2,544

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.20	22	0.12	13	0.32	35
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.08	16	0.58	9	1.66	25
SUBTOTAL - SEALANTS	0.40	/m2 GFA		38		22		60
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	316.00	316	341.00	341
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	171.00	171	196.00	196
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	63.00	63	974.00	974	1,037.00	1,037
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	105.00	105	568.00	568	673.00	673

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.00	12	45.95	46	57.95	58
- 711 x 2080 mm	3	No.	12.00	36	45.95	138	57.95	174
- 762 x 2080 mm	6	No.	12.00	72	45.95	276	57.95	348
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	9.00	9	37.50	38	46.50	47
- 1220 x 2080 mm	3	No.	9.00	27	64.62	194	73.62	221
- 1320 x 2080 mm	1	No.	9.00	9	69.67	70	78.67	79
- 1524 x 2080 mm	1	No.	9.00	9	74.72	75	83.72	84
- 1830 x 2080 mm	1	No.	9.00	9	86.84	87	95.84	96
SUBTOTAL - DOORS	22.20	/m2 GFA		401		2,951		3,352
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.00	32	28.99	58	44.99	90
11.20 Security deadbolt.	1	No.	16.00	16	30.99	31	46.99	47
11.30 Latch sets.	7	sets	6.25	58	12.99	91	21.24	149
11.40 Bathroom privacy latch sets.	3	sets	8.25	25	14.99	45	23.24	70
11.60 Door stops.	11	No.	2.02	22	1.65	18	3.67	40
SUBTOTAL - HARDWARE	2.62	/m2 GFA		153		243		396

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.08	1,950	2.18	1,380	5.26	3,330
13.40 Finish to ceilings - textured.	138	m2	1.37	189	1.17	161	2.54	351
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.80	136	4.49	763	5.29	899
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.14	101	6.28	559	7.42	660
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.26	67	0.32	83	0.58	150
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.26	18	0.24	16	0.50	34
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.67	46	2.30	156	2.97	202
SUBTOTAL - WALLBOARD	37.26	/m2 GFA		2,507		3,119		5,626

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.04	127	11.65	245	17.69	371
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.60	382	24.73	2,621	28.33	3,003
SUBTOTAL - FLOORING	22.34	/m2 GFA		508		2,866		3,374
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.32	35	1.22	10	5.54	44
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	64.00	64	20.28	20	84.28	84
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.32	91	1.22	26	5.54	116
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.24	1,010	0.69	311	2.93	1,321
15.30 Two coats semigloss on internal doors and frames.	10	No.	24.00	240	5.78	58	29.78	298
15.35 Two coats semigloss on bi-fold doors.	7	No.	30.00	210	7.52	53	37.52	263

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.90	174	0.23	44	1.13	218
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.90	4	0.23	1	1.13	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.80	6	1.20	2	4.00	8
15.43 Stain finish to cedar deck.	14	m2	3.18	45	0.94	13	4.12	58
15.44 Stain finish to deck handrail and balustrade.	16	m	5.11	82	1.70	27	6.81	109
SUBTOTAL - PAINTING	16.72	/m2 GFA		1,959		565		2,524
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.42	68	6.21	124	9.63	193
16.20 Vanities and base cabinets.	7	m	33.50	235	405.00	2,835	438.50	3,070
16.21 Kitchen wall cabinets.	4	m	33.50	134	227.00	908	260.50	1,042
SUBTOTAL - FITTINGS	28.50	/m2 GFA		437		3,867		4,304

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.75	52	8.80	79	14.55	131
17.20 Medicine cabinets	2	No.	11.50	23	58.95	118	70.45	141
17.25 Mirrors	2	No.	11.50	23	75.00	150	86.50	173
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.25	13	6.49	13	12.74	25
17.40 Mail box and house numbers	1	set	6.25	6	29.98	30	36.23	36
17.50 18 mm dia. chrome coat rods.	6	No.	3.50	21	4.81	29	8.31	50
SUBTOTAL - SPECIALTIES	3.69	/m2 GFA		138		419		557
18. APPLIANCES								
18.10 Range hood	1	No.	16.00	16	104.00	104	120.00	120
SUBTOTAL - APPLIANCES	0.79	/m2 GFA		16		104		120

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	1,920.00	1,920	3,430.00	3,430	5,350.00	5,350
SUBTOTAL - PLUMBING	35.43	/m2 GFA		1,920		3,430		5,350
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	710.00	710	2,020.00	2,020	2,730.00	2,730
SUBTOTAL - HEATING	18.08	/m2 GFA		710		2,020		2,730

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,210.00	1,210	1,645.00	1,645	2,855.00	2,855
SUBTOTAL - ELECTRICAL	25.20	/m2 GFA		1,210		2,595		3,805
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - LLOYDMINSTER	505.97	/m2 GFA		$20,867		$55,534		$76,401

DETAILED COST ESTIMATES FOR PEACE RIVER

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.62	184	1.06	315	1.68	499
1.11	Excavate trench for garage grade beam.	4	m3	4.14	17	7.04	28	11.18	45
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.91	67	1.10	81	2.01	149
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.30	83	11.92	298	15.22	381
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.98	161	0.33	54	1.31	215
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.12	1,811	8.12	1,811
	SUBTOTAL - EXCAVATION	20.52	/m2 GFA		511		2,587		3,098
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	106.81	2,029	106.81	2,029

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	106.81	107	106.81	107
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	16.00	336	32.20	676	48.20	1,012
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.82	214	0.82	214
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.82	30	0.82	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.32	98	1.32	98
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	24.89	996	12.20	488	37.09	1,484
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.76	228	4.90	127	13.66	355
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.60	324	7.80	702	11.40	1,026
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.54	336	11.52	852	16.06	1,188

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	24.00	24	225.00	225	249.00	249
2.60	Parging to concrete walls.	10	m2	9.48	95	4.32	43	13.80	138
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	640.00	640	1,660.00	1,660	2,300.00	2,300
	SUBTOTAL - CONCRETE	67.75	/m2 GFA		2,978		7,252		10,230
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.38	48	0.38	48	0.76	97
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	6.30	284	4.48	202	10.78	485
	SUBTOTAL - DAMPROOFING	3.85	/m2 GFA		332		250		582

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.	SIDING								
4.10	100 mm vinyl siding including building paper.	149	m2	6.80	1,013	14.62	2,178	21.42	3,192
4.20	Prefinished perforated aluminum soffit.	44	m2	6.09	268	10.60	466	16.69	734
4.30	Prefinished aluminum fascia.	70	m	1.14	80	2.75	193	3.89	272
4.40	Brick facing to front elevation.	20	m2	48.27	965	45.51	910	93.78	1,876
	SUBTOTAL - SIDING	40.22	/m2 GFA		2,326		3,747		6,073
5.	ROOFING								
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.22	400	4.90	882	7.12	1,282
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.85	185	4.93	493	5.76	576
	SUBTOTAL - ROOFING	12.98	/m2 GFA		585		1,375		1,960

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	434.02	3,646	434.02	3,646
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	591.34	1,419	591.34	1,419
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.24	2,900	8.24	2,900
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.40	913	5.40	913
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.64	4,325	0.00	0	28.64	4,325
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.45	25	0.91	51	1.36	76

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	8.32	17	15.45	31	23.77	48
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	495.00	495	624.00	624	1,119.00	1,119
	SUBTOTAL - CARPENTRY (ROUGH)		95.66	/m2 GFA		4,861		9,584		14,445
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	85.00	85	65.00	65	150.00	150
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	87.00	87	82.00	82	169.00	169
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	88.00	88	95.00	95	183.00	183
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.50	18	8.39	34	12.89	52

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	59.00	118	127.00	254	186.00	372
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.60	578	1.25	451	2.85	1,029
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.00	56	39.96	80	67.96	136
	SUBTOTAL - CARPENTRY (FINISH)	13.85	/m2 GFA		1,030		1,061		2,091
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	615.00	615	615.00	615
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	265.00	1,590	265.00	1,590
	- 900 x 1550 mm	2	No.	0.00	0	320.00	640	320.00	640
	SUBTOTAL - WINDOWS AND GLAZING	18.84	/m2 GFA		0		2,845		2,845

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.24	26	0.14	15	0.38	41
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.16	17	0.61	9	1.77	27
SUBTOTAL - SEALANTS	0.45	/m2 GFA		44		24		68
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	330.00	330	356.00	356
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	179.00	179	205.00	205
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	67.00	67	1,050.00	1,050	1,117.00	1,117
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	115.00	115	620.00	620	735.00	735

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.50	14	46.95	47	60.45	60
- 711 x 2080 mm	3	No.	13.50	41	46.95	141	60.45	181
- 762 x 2080 mm	6	No.	13.50	81	46.95	282	60.45	363
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.50	12	45.28	45	56.78	57
- 1220 x 2080 mm	3	No.	11.50	35	78.54	236	90.04	270
- 1320 x 2080 mm	1	No.	11.50	12	84.44	84	95.94	96
- 1524 x 2080 mm	1	No.	11.50	12	90.56	91	102.06	102
- 1830 x 2080 mm	1	No.	11.50	12	105.24	105	116.74	117
SUBTOTAL - DOORS	24.24	/m2 GFA		450		3,210		3,660
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.50	35	29.60	59	47.10	94
11.20 Security deadbolt.	1	No.	17.50	18	31.60	32	49.10	49
11.30 Latch sets.	7	sets	8.75	61	13.25	93	22.00	154
11.40 Bathroom privacy latch sets.	3	sets	8.75	26	15.30	46	24.05	72
11.60 Door stops.	11	No.	2.10	23	1.69	19	3.79	42
SUBTOTAL - HARDWARE	2.72	/m2 GFA		163		248		411

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.97	1,880	2.38	1,507	5.35	3,387
13.40 Finish to ceilings - textured.	138	m2	1.44	199	1.28	177	2.72	375
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.92	156	4.20	714	5.12	870
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.54	137	7.51	668	9.05	805
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.35	91	0.33	85	0.68	176
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.25	17	0.60	41
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.75	51	2.20	150	2.95	201
SUBTOTAL - WALLBOARD	38.78	/m2 GFA		2,538		3,318		5,856

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.47	136	12.42	261	18.89	397
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.69	391	28.24	2,993	31.93	3,385
SUBTOTAL - FLOORING	25.04	/m2 GFA		527		3,254		3,781
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.28	42	1.31	10	6.59	53
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	70.00	70	22.65	23	92.65	93
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.28	111	1.31	28	6.59	138
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.25	1,015	0.72	325	2.97	1,339
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.00	270	6.32	63	33.32	333
15.35 Two coats semigloss on bi-fold doors.	7	No.	34.75	243	8.21	57	42.96	301

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.96	185	0.26	50	1.22	235
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.96	4	0.26	1	1.22	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	3.08	6	1.20	2	4.28	9
15.43 Stain finish to cedar deck.	14	m2	3.37	47	0.83	12	4.20	59
15.44 Stain finish to deck handrail and balustrade.	16	m	5.30	85	1.70	27	7.00	112
SUBTOTAL - PAINTING	17.72	/m2 GFA		2,078		598		2,676
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.92	78	6.30	126	10.22	204
16.20 Vanities and base cabinets.	7	m	40.00	280	450.00	3,150	490.00	3,430
16.21 Kitchen wall cabinets.	4	m	40.00	160	255.00	1,020	295.00	1,180
SUBTOTAL - FITTINGS	31.88	/m2 GFA		518		4,296		4,814

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.33	57	9.60	86	15.93	143
17.20 Medicine cabinets	2	No.	12.30	25	64.05	128	76.35	153
17.25 Mirrors	2	No.	12.30	25	82.40	165	94.70	189
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.70	13	7.06	14	13.76	28
17.40 Mail box and house numbers	1	set	6.70	7	32.60	33	39.30	39
17.50 18 mm dia. chrome coat rods.	6	No.	4.15	25	5.98	36	10.13	61
SUBTOTAL - SPECIALTIES	4.06	/m2 GFA		151		462		613
18. APPLIANCES								
18.10 Range hood	1	No.	20.00	20	112.00	112	132.00	132
SUBTOTAL - APPLIANCES	0.87	/m2 GFA		20		112		132

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,365.00	2,365	3,760.00	3,760	6,125.00	6,125
SUBTOTAL - PLUMBING	40.56	/m2 GFA		2,365		3,760		6,125
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	800.00	800	2,370.00	2,370	3,170.00	3,170
SUBTOTAL - HEATING	20.99	/m2 GFA		800		2,370		3,170

1988 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1988

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

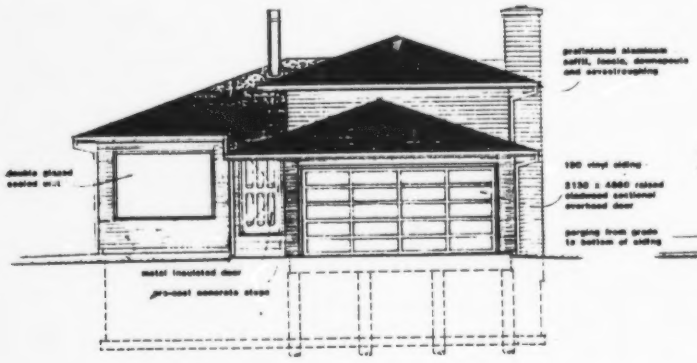
	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,150.00	1,150	1,800.00	1,800	2,950.00	2,950
SUBTOTAL - ELECTRICAL	26.16	/m2 GFA		1,150		2,800		3,950
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - PEACE RIVER	543.58	/m2 GFA		$23,427		$58,653		$82,080

APPENDIX

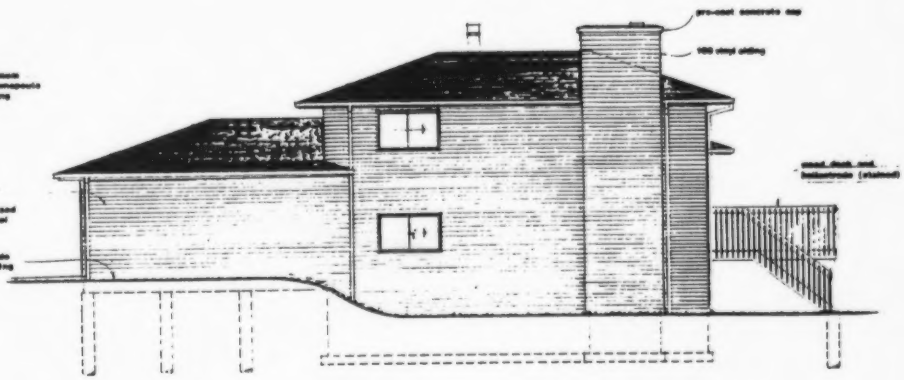
Reduced Drawings : Single-Detached Dwelling

BASEMENT/FOUNDATION PLAN

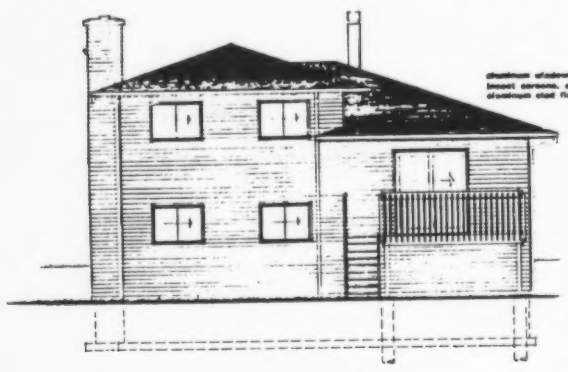
MAIN/UPPER FLOOR PLAN



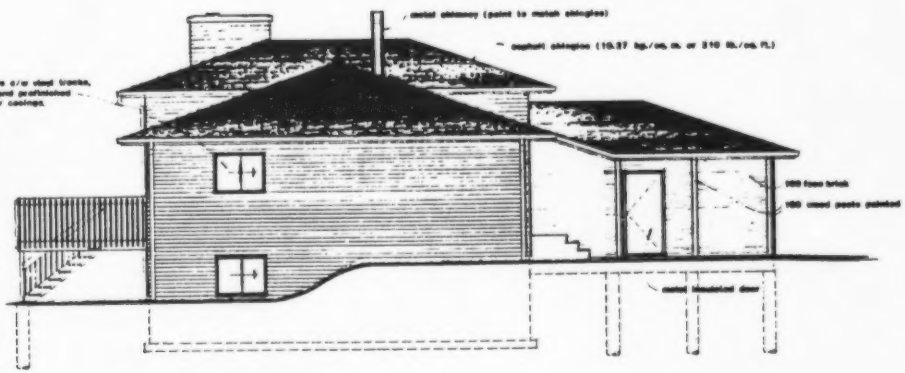
FRONT ELEVATION



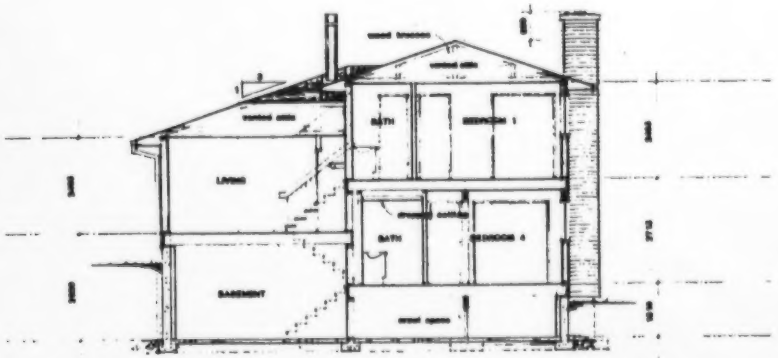
LEFT SIDE ELEVATION



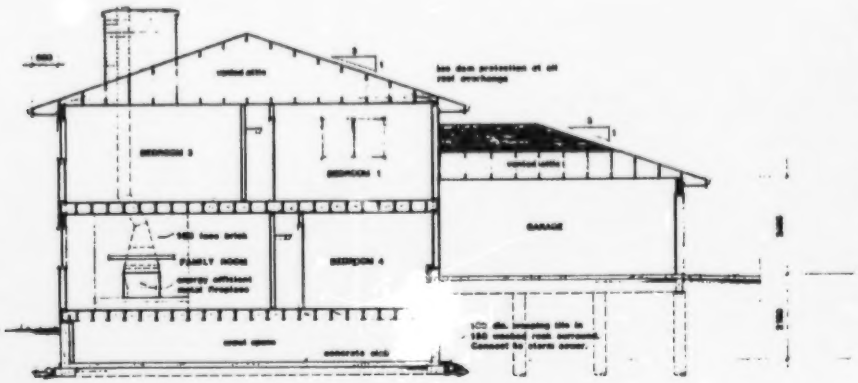
BACK ELEVATION



RIGHT SIDE ELEVATION



BUILDING CROSS SECTION



BUILDING CROSS SECTION

SPECIFICATIONS

FOUNDATIONS

- 20 Mpa, type 50 concrete in 400 x 200 reinforced concrete footings
- 20 Mpa, type 50 concrete in 200mm re concrete foundation walls c/w 4 rows of 10M rebar
- 20 Mpa concrete basement floor slab 75mm thick over 6 mil poly, and 100mm compacted sand
- 100mm reinforced garage floor on compacted sand
- 300mm dia. reinforced concrete piles under garage floor and grade beam
- 100mm dia. weeping tile c/w minimum of 150 washed gravel surround
- asphalt protection spray applied to interior and exterior of foundation

FRAMING

- floor joists 38 X 235 KD spruce at 400mm o.c. and c/w 38 X 38 cross-bridging
- built-up 2x beams on adjustable steel posts
- 140mm tongue and groove fir plywood subfloor
- 19mm fir plywood underlay
- exterior walls 38 X 140 KD spruce at 400mm o.c.
- interior partitions 38 X 89 KD spruce at 400mm o.c.
- 6mm "sheathboard" wall sheathing
- pre-engineered wood roof trusses
- 12mm spruce plywood roof sheathing

INSULATION/VAPOUR BARRIER/DRYWALL

- exterior walls R20 glass fibre batts
- vapour barrier sheathed at all joints
- ceilings R40 loose fill glass fibre insulation and 6 mil poly. v.b.
- 13mm gypsum wallboard throughout

EXTERIOR FINISHES

(see building elevations on drawing no. 2)

DOORS AND WINDOWS

- metal insulated front door
- 1800 wide aluminum patio door c/w tinted vacuum seal
- prefinished aluminum clad fir frames and casings
- hollow core interior doors (colour/ and wallpaper)
- mahogany faced bi-fold closet doors
- aluminum windows c/w vinyl bottle, tinted vacuum, and prefinished aluminum clad fir casings
- tempered glass sealed unit in living room window
- 4880 wide X 2130 high raised sectional overhead garage door (painted)

INTERIOR FINISHES

- ceramic tile in bath surround
- texture finish to ceilings
- glued vinyl flooring in bathrooms, kitchen and dining area
- 33oz., 100% nylon carpet with 6mm slide foam underlay
- paint to walls; latex sand-gloss (washroom, kitchen, dining area)
- stained baseboards and trim

FITTINGS

- shelves fir plywood shelving with hardwood edging
- bathroom vanity (paint wood)
- kitchen overhead and base cabinets (solid wood)
- hardwood wood railing c/w spindles, railing shoe, and newel posts

SPECIALTIES

- all washroom accessories including full-size shower curtains
- medicine cabinets
- 51mm dia. metal shower curtain rods
- mailbox and house numbers
- range hood
- energy efficient 51mm fireplace c/w fan
- specified hardware throughout

PLUMBING AND HEATING

- stainless steel double kitchen sink
- vanity sinks
- china closets
- fiberglass tub/shower units
- dishwasher rough-in
- 3 glass bath on linen hood
- humidifier attachment
- 3 laundries
- 33 Imp. gallon (150 litres) water heater type 9vet
- gas fired, forced air furnace c/w humidifier

ELECTRICAL

- 100 amp, 32 breaker electrical service
- 220 volt electrical service to dryer and range locations
- recessed c/w fluorescent lighting fixture in each bath
- GFI protected plugs in bathrooms
- 3 exterior waterproof wall plugs
- dishwasher rough-in
- 3 telephone locations
- 3 cable locations
- smoke detectors
- electrical wiring for future garage door opener
- range hood installation
- bathroom fans
- specified lighting package
- roughed-in central vacuum system